

THOUGHTS THAT BREATHE

THOUGHTS THAT BREATHE

BY

M. P. HANSEN, M.A., LL.B.

DIRECTOR OF EDUCATION, VICTORIA, AUSTRALIA

1932

ROBERTSON & MULLENS LIMITED

ELIZABETH ST., MELBOURNE, C.1

H 24 T

acc. no. 7367

*Registered at the General Post Office, Melbourne, for transmission
through the post as a book*

Wholly set up and printed in Australia by
BROWN, PRIOR & CO. PTY. LTD.
Printcraft House
430 Little Bourke Street, Melbourne, C.1.
1932

INTRODUCTION

BY

PETER BOARD, C.M.G., M.A.

SOMETIME DIRECTOR OF EDUCATION, NEW SOUTH WALES

In these addresses, Mr. Hansen's vision takes a wide sweep over the field of educational activity. In the building up of men and women for both the duty and the beauty that the world has in store for them, he sees more than the business of teaching and learning. Apart from the facts which it is necessary that children should know, there is beauty to be appreciated, there are interests and aspirations to be cultivated, there are desires to be stimulated, there is personality to be developed. Underlying all these addresses there is the constant reminder that education involves all these things and that its processes and aims are as complex and diverse as human nature itself.

It is because education involves so much more than the acquisition of knowledge, important though that is, that broadcasting, concerning which as an instrument of education Mr. Hansen makes a valuable contribution, can never be such an efficient agent in education as to displace the teacher. For there cannot be effective teaching unless the pupil can question and discuss, and, so far, at any rate, the pupil cannot discuss a subject with a broadcasting machine. It will not answer his questions.

Mr. Hansen's presentation of the meaning of education makes clear how difficult the task of the teacher is, and toward what high purposes that task must be directed. For teaching is not getting children to learn, it is getting children to think, a much more difficult work. And beyond the intellectual equipment of the child there lies that part of his education that depends

on his personal contact with the personality of the teacher. The formative influence that comes from the impinging of character upon character, the stimulation that comes from the impact of our personal attitude towards life upon another's, these make the personality of the teacher a predominant factor in education.

With regard to the contribution which education has to make towards national welfare, the author of these addresses leaves no doubt. In the modern commonwealth, where every adult citizen has a voice in the government, the well-being of the State must depend upon the intelligence of its citizens, their sense of political duty, and their readiness to render disinterested service to the community. So far as the schools lay the foundation of these civic qualities, so far do they justify the making of education one of the most important State functions. The complaint is sometimes heard that they have not done so. The school, however, is only one of the many educative influences that play upon the child and help to form his citizenship, and the school, like the church, finds in these influences something which it has to counteract. At the same time, it is well that teachers should realise that their schools have still a higher goal to reach before they render their highest service to the nation.

These addresses also contain some timely warnings. When education becomes harnessed to an education "system" it is in danger of becoming rigid and stagnant. The work of the school, if its true purpose is to be fulfilled, must always be closely related to the conditions of life outside the school. Curricula therefore must be responsive to the changes in these conditions, and be subject to frequent revision. The warning is not superfluous that the systematising of education should not prevent the curriculum from being adapted to the tide of human affairs, nor hinder the teacher in applying to his methods of teaching the results of research and experiment.

Mr. Hansen's plea on behalf of educational research deserves sympathetic attention. The field for investigation and experiment is a wide one. There has been and is still so much of the empirical and traditional in educational practice that there is a need for the organisation of inquiry into many educational problems, upon the results of which the future progress of school practice must depend.

The author of these addresses has rendered a great service to the educational worker in giving these thoughts of his a permanent form.

Sydney,

2nd January, 1932.

CONTENTS

	Page
Introduction	v
Education and Leisure—	
A Bewildered World	1
The Way Out ?	14
Literature and Art	30
School Clubs and Hobbies	46
More Clubs and Associations	69
Mechanical Aids in Education—	
i—Moving and Sound Pictures	92
ii—Broadcasting	113
Education in Australia	129
Our Changing Education	150
Some Ideals of Australian Education	168
Existing Difficulties	179
Education and Waste	193

EDUCATION AND LEISURE.

The first eight Addresses were given at the Teachers' Summer School at Whangarei, New Zealand, in January, 1932.

I.

A BEWILDERED WORLD.

Since the emergence of *Homo Sapiens* on this planet some thousands of years ago—a time really very short compared with geological periods—man has developed gradually into a social being as we know him to-day. I do not propose to attempt to describe even in outline this wonderful development, the beginnings of which some recent researches seem to place as recently as six or seven thousand years ago, though I personally think the period must have been of much longer duration than that.

The art of recording speech goes back to beyond 3000 B.C., when human beings were already living in societies, and to do this successfully is easily the most difficult art the human race has had to learn. In spite of all the experience of the past in the organisation of society, in the various forms of government that have been tried, and in the economic and political systems that have at different times flourished and then fallen, we cannot yet claim to have reached a permanent satisfactory solution. So far no organisation of society that has been tried has stood the test of time. Never, perhaps, in the whole of our history has that failure been more evident than it is to-day. We are living "in the foremost files of time," heirs to the wonderful inheritance that our forbears have bequeathed in tradition, in science, in art, in literature, in skills, in discoveries and in inventions that especially in the last fifty years have followed one another with amazing rapidity, and yet, somehow, to-day "the world is out of joint." Our

economic and political systems have failed to keep pace with our scientific and industrial achievements, with the result that world-wide reorganisation of these systems is our most pressing and vital problem.

It should now be clear to all thinking people that at the present time throughout the world the human race is drifting either to chaos or to a higher world order of civilisation. Which is it to be? Never was there greater need for the exercise of those attributes which we deem highest in civilised man—self-sacrifice, co-operation, clear thinking untainted by sectional or self interest, the suppression of class-consciousness and of individual greed. What a challenge this is to each and all of us! What a test of our faith in the improvability (I shall not say perfectability) of man by education!

After all, we should remember that the idea of universal education is less than a century old, and as yet is far from full practical realisation anywhere. Surely education is the one project which in these difficult times can and should unite the entire population of each country irrespective of class or creed or age. Education is not a special interest; it is the vital concern of all. The right to live is one of the most fundamental rights of the individual, and education is training in living fully and worthily. A primary school training alone, a training in rudiments, the command of the "tools of education," namely, the ability to read, to write, to express oneself and to have an elementary knowledge of social behaviour, admirable as it is, is not nearly enough. It is only in the present century that the attempt to give universal secondary education to all capable of it has been made. We are as yet only at the beginnings of this stage. As this stage is developed and facilities for adult education extended, each country providing these facilities will have at its disposal for the satisfactory solution of present and future problems greater and ever-increasing forces of trained intelligence and imagination than have ever been available for such service in the past. It will

surely need them all to secure a successful issue from present difficulties. In every country education should be *the* major function of government. Any generation which does not adequately equip its successors for the work of adapting and improving the institutions of civilisation has failed utterly and vitally; it, indeed, commits a cardinal biological sin, the wages of which is death, not undeserved. Efficient forms of social organisation and government do not drop from the skies. Man, the aspiring, toiling and experimenting maker of institutions, has to create them, too often with pain and blood and sweat; too often they are accompanied with heart-breaking disappointment, but they must grow from the soil of life.

During the last few years we have been living in a time when we seem to have reached the climax of economic maladjustment, while at the same time civilisation appears to be suffering from over-organisation. All countries appear to be suffering equally. In agricultural spheres there is over-production of food, and yet, at the same time people are pinched for food or even starving. In the industrial world consumption fails to keep pace with mass-production, and unemployment is rampant; in fact, the world to-day is very sick. The scientists, engineers, and technologists with their marvellous inventions and discoveries have made it so. They have given us radio, telegraph systems, aeroplanes, motors and other swift means of communication and transport. They have given us harvesters and turbines and all manner of automatic machinery. The organisation of production and distribution is on the most gigantic scale. The standard of living has been raised beyond the dreams of our fathers. Shorter hours, better wages, lower prices, higher profits, more leisure are the rule. Yet the world is very sick. Take unemployment alone. The Americans have over 8,000,000 people looking for jobs. England will soon emerge from her twelfth winter of unexampled unemployment, with figures that pro-

mise to break the record. Germany's unemployment figures run into many millions, and her finances are so crippled that she is practically insolvent. Italy has about three-quarters of a million people out of work, and so on with other countries. In fact, the unemployed in their totality represent the largest army of people of leisure the world has ever seen. Unhappily it is enforced leisure, and the leisure of the idle rich is a vastly different thing from the enforced leisure of the idle poor, though too much of either kind may easily become disastrous to society and demoralising to the individual. The problem of this enforced leisure is confronting all peoples in a most acute and menacing form. Only by heroic measures can Australia escape bankruptcy, and, indeed, every country in the world is facing huge deficits. Crippled markets, falling prices, economic stagnation are the rule everywhere. What an unhappy picture! Every country is feeling the terrific strain. Brazil cannot dispose of her coffee; the price of rubber has fallen below the cost of production; except at suicidal sacrifice, Argentina and Australia cannot sell their wool and wheat, Sweden her wood pulp, Poland her surplus rye, United States her cotton, motors and sewing machines, Japan her cotton goods, and so on. Everywhere employment is being rationed, taxation has soared to heights hitherto undreamt of, bankruptcies have reached alarming figures, agriculture and manufacturing generally have crashed with the markets. Russia is in the throes of a vast communistic experiment, which, though intensely interesting, as yet gives no distinct promise of success, in spite of the surrender of personal liberty, the practical enslavement of the people and their immersion in a sea of gross materialism. And yet in nearly every country the various political parties are imitating Nero's unhistorical stunt. The old game of "Ins" v. "Outs" continues. The old maxim that the function of an opposition is to discredit the government is still followed, instead of all

parties pulling together as is required in a time of such national emergency. Perhaps some even yet fondly believe that the situation can be saved by a slogan! The gravity of the position is, however, tending to force political parties to greater co-operation.

Efforts of reorganisation and invention during recent years have resulted in an increase in production from each individual, a reduction of costs and a greater output for a given intake. The rapid advance in production has caused a fall in world prices, which has thrown the social organism and the whole economic structure into disorder. Production has increased far more rapidly than the power of the community to absorb the goods produced. Men displaced by the industrial system cannot find avenues of employment, so that it is estimated there are over 30,000,000 people looking for work to-day. The whole industrial system seems to have got beyond control. The results of applied physical, chemical and biological science have outstripped each community's power of adjustment to actual (not to mention potential) production. What is to be done with the surplus of men who are no longer needed to produce goods, but who are needed as consumers? Here we have a world swamped with motor cars, wireless sets, gramophones and the like—over-production and lack of opportunity for employment—and the question arises—What can we do about it? Shorter working hours and more leisure must inevitably result. Unfortunately, many of those who will have little or no opportunity for labour do not know how profitably to employ their leisure. As a class in every country, the present unemployed are least fitted to use wisely the increased leisure created by present conditions.

Most people are simply bewildered at the present world disorganisation. Many blame others, nation blames nation, class blames class, individuals blame individuals. Some blame education. Is the solution to be found in checking the march of knowledge, in lessen-

ing our efforts, or in smashing the machine? Like the Chinese of old, should we beat our joss? To attempt to stop progress, to cut off educational facilities, to stop scientific work and investigation would be to exhibit the mentality of a moron. That is rank cowardice. Civilisation may be tottering and threatening to crumble in ruins, but the greater the danger the greater is the challenge to each and all of us, both individually and collectively, to exercise those virtues which make for the uplift and progress of men. There is ample scope for the exercise of patience, endurance, tolerance, and full understanding; of faith, hope and charity.

In the past, civilisations have risen and fallen. Indeed, it would almost seem that civilisation itself is a recurrent phenomenon. It reaches a peak and then declines. It has what the ancients used to call a "Great Year," lasting perhaps 1000 calendar years, in which it sprouts, flourishes, decays and dies. In the past, its fall was generally hastened by softness from within and attacks by a more virile nation from without. Nowadays, in spite of such studies as that of Lothrop Stoddard in *The Rising Tide of Colour* and *The Revolt Against Civilisation*, the danger of collapse seems to be mainly from within. Many writers who have studied the subject, however, seem to agree that the present civilisation is distinctly on the decline. Spengler in his great work, *The Decline of the West*—a stupendous and rather difficult study prepared before the Great War, and first published in 1917—seems to reach the conclusion that we are entering on an "Age of Tyrants" in the older Greek sense. The subsequent history of Italy and Russia seems to support his conclusion.

The small book of W. M. Flinders Petrie in Harper's Library of Living Thought, with the title *The Revolutions of Civilisation*, was first published in 1911, and it also supports this view that we are now in a declining phase of civilisation. The "Great Year" goes through the changes of Spring, Summer, Autumn and Winter,

and unhappily the present is "the winter of our discontent." Let me quote from the concluding pages on Stages of Government, in the book last mentioned:

"At every invasion by a new people, which, as we have seen, is the necessary foundation of a new period of civilisation, there must be strong personal rule. The holding together of the invaders, the decisive subjection of the invaded, the strife of the fusion of peoples, all require an autocracy of greater or less scope. This period lasts during four to six centuries.

"The next stage is an oligarchy, when leadership is still essential, but the unity of the country can be maintained by law instead of by autocracy. This stage varies in length; in Greece and Rome it was about four centuries, in Mediæval Europe about five or six centuries.

"Then gradually the transformation to a democracy takes place, beginning about the great phase of literature in Greece, Rome and Modern Europe. During this time—of about four centuries—wealth—that is, the accumulated capital of facilities—continues to increase. When democracy has attained full power, the majority without capital necessarily eat up the capital of the minority, and the civilisation steadily decays, until the inferior population is swept away to make room for a fitter people. The consumption of all the resources of the Roman Empire, from the second century, when democracy was dominant, until the Gothic kingdom arose on its ruin, is the best-known example in detail. Such is the regular connection of the forms of government, or the relations of classes, which is inherent in the conditions of the revolutions of civilisation."

This is the alarming position the rising generation will soon be called in their turn to face. Constructive policies are essential, and it is the part of education to train the rising generation to apply scientific analysis to the whole position, to unite a common intelligence and a common idealism in a co-operative effort at finding a solution. It is in times of grave difficulty and danger

that far-sighted measures are imperatively necessary. Both our political and economic systems must inevitably undergo great changes. The part to be played by the teacher in preparing the rising generation to work together with goodwill to avoid national catastrophe is more than ever important.

It would appear that economic disarmament and all that this implies will have to follow military and naval disarmament throughout the world. For a time political disarmament might well be tried also.

I read recently that there is a bootmaker using a very modern machine plant in Czecho-Slovakia who can supply the entire world with boots. In Europe to-day there is enough machinery to supply the needs of about three times the population of the entire world with all the manufactured goods required. Vast motor and machinery plants in America are idle for a great portion of their time. Men have enforced leisure, and do not know what to do with it in a purposive and worthy way.

Civilisation as we know it to-day seems to have passed its highest point, and following the usual course of past civilisations it appears to be on the decline. It may be that the present generation is seeing the final stages of this era.

What a challenge this is to each of us, and perhaps to teachers especially. We may be bewildered, but do not let us be dismayed. Let us "face the unseen with a cheer." After all, man has only just started his career on this earth. He is as yet a baby, and has lots to learn. As C. E. M. Joad puts it in his recent book, *The Story of Civilisation*—"Scientists reckon that there has been life of some sort on the earth in the form of jelly-fish and that kind of creature for about twelve hundred million years; but there have been men only for about one million years—and there have been civilised men for about eight thousand years at the outside. These figures are difficult to grasp, so let us scale them down.

Suppose that we reckon the whole past of living creatures on the earth as one hundred years; then the whole past of man works out at about one month, and during that month there have been civilisations for between seven and eight hours. So you see there has been little time to learn in, but there will be oceans of time to learn better. Taking man's civilised past at about seven or eight hours, we may estimate his future, that is to say, the whole period between now and when the sun grows too cold to maintain life any longer on the earth, at about one hundred thousand years." That is, on our scale. This works out at about twelve hundred thousand million years in real time. This seems to give ample time for developments as yet undreamed of.

After this general and I fear somewhat depressing introduction, I shall now come closer to my subject—Education *and* Leisure. I note the title assigned is not Education *for* Leisure, and I shall assume that Education and Leisure is to be regarded as a unity and not treated as two independent subjects.

Training in how to make right use of leisure is even more important than training in efficiency for work. Vocational education or training for a living has its importance which should not be minimised, but training for life in the fullest sense has a far greater importance, and this is now receiving increasing recognition. The question immediately arises for what life? The present? The past? The near future or the distant future? One will admit that education should train for all of these, but the emphasis will be different with different individuals and at different times. The classicists still stoutly maintain that a knowledge of the past, and especially of the glory that was Greece and the grandeur that was Rome, is a sufficient education for the needs of to-day. Others may maintain that a sound training in religion to ensure a happy life in heaven (which I have termed "the distant future") is all sufficient. Both a training in spiritual matters and a know-

ledge of the past are essential parts of education, but it appears to me that the main emphasis in this business of preparation for complete living must have relation to life as it is to-day and as it may be assumed to become in the near future. The statue of Education might well be "two-headed Janus," looking before and after, forward to the future, backward to the past.

The inventions I have referred to and the consequent industrial organisation have resulted in mass production of goods on a gigantic scale, causing over-production and inability to find markets for the products. All of this should mean greater leisure for the individual, more time to develop his inner resources, fuller opportunity to co-operate with others to advance the general well-being of the community, greater freedom to devote himself to family life and civic interests. The tendency of family life to disintegrate must be checked if possible. The aggregation of populations in cities, which is a phenomenon of quite recent times, brings with it many new problems, one of the most important of which is the right use of leisure. Working hours are already limited, and there is reason to think that in the future there will be still further limitations of the hours of labour necessary merely to earn a living. This means still greater time for leisure, and it is essential that this time should be utilised worthily. If not, this increased freedom may easily be a bane instead of a blessing to mankind. Unfortunately, it is not always true of all that "we needs must love the highest when we see it." Here education must play an important part in training the rising generation to love

"the pure and true

And the beauteous and the right."

The attitude that finds delight in service, in helping lame dogs over stiles, in forwarding the common good, in preparing the rising generation to face the battle of life with enthusiasm and a cheer, in spite of its manifest difficulties, in eliminating greed and self-interest—this

seems to be the most ennobling part of the work of our great profession as teachers. The times unhappily show too much self-seeking and too little altruism.

One of our Australian poets, J. Le Gay Brereton, expresses in a poem to his son, Wilfred, the attitude of courage that should be cultivated in the young—

"You must face the general foe—
A phantom pale and grim.
If you flinch at his glare, he'll grow
And gather your strength to him;
But your power will rise if you laugh in his eyes and away in a
mist he'll swim.

Joy to you, joy and strife,
And a golden East before,
And the sound of the sea of life
In your ears when you reach the shore,
And a hope that still with as good a will you may fight as you
fought of yore."

"As the twig is bent, so is the tree inclined" is an old but true saying. Your part, as teachers, is to give the right direction to the twig, and this direction should be that which you feel is right in your best moments. Looking back on the achievements of the human race in its long struggle in the past, we must feel pride in those aspirations and results. Looking forward into the future, can we be so craven-hearted as to doubt that good will triumph ultimately?

"Men my brothers, men the workers, ever reaping something new,
What we have done but earnest of the things that we shall do."

We may well think with Tennyson that

"All is well, though faith and form
Be sundered in the night of fear;
Well roars the storm to them that hear
A deeper voice across the storm
Proclaiming social truth shall spread,
And justice, even tho' thrice again
The red fool-fury of the Seine
Should pile her barricades with dead."

This is surely the right attitude to cultivate, and even at the worst, if catastrophe and chaos can help to make

us really civilised, it may yet pay for its cost in present and future suffering by the future actions of those who can learn by the lesson. Individually, perhaps, we as teachers can do very little, but collectively we have a tremendous power if it is rightly used and directed. At least each of us can try to make our own little world happier and better through our having passed along this way.

You will, of course, meet those who maintain that the present capitalistic system is all wrong, and who expound communistic doctrines offering a simple and ready-made solution for problems as old and as complex as history itself. To these proposed solutions I would say, "Keep an open mind." These theories should be examined scientifically and critically in the fullest possible way, and objective tests of their validity applied before adopting any of them in a wholesale way. Revolution and "short-cuts" may land a community in an even greater mess, as history has so often shown. As Byron says—

"A thousand years scarce serve to form a state
An hour may lay it in the dust."

And again,

"Assyria, Greece, Rome, Carthage—what are they?"

The labours of man to lift civilisation to higher levels throughout the ages may be likened to those of Sisyphus painfully rolling his stone up the hill, but always failing to reach the top before the stone slips and rolls down again. At present the system seems to have got a little out of hand, and we are in the position of the bus driver depicted by *Punch* in the early days of motor buses, who kept careering round the streets because he could not stop the blooming thing.

In the long run (possibly in terms of centuries) scientific thinking may prove even more revolutionary than some of the "short-cuts" proposed by the revolutionaries of to-day. This fundamental task is being undertaken in many countries in a thorough-going way, and

it may be that we are at the dawn of a creative era, in which mankind will proceed to still greater heights than those achieved in the past. A vision of a perfect world is one that has often attracted the finest minds of the past. Possibly great changes and reforms can nowadays be brought about more expeditiously and less disastrously than in the past. Rapid communication has brought nations much closer together, there is a better mutual understanding of each other's problems, and although the forces of universal education are only lately in the field, and have not yet attained their full power and influence, they must in the end tell strongly on the side of peaceful adaptation and reorganisation. Perhaps in modern times in the pursuit of material gains and selfish interests we have lost our souls and have forgotten the vision. But surely we still have Mores with their Utopias; Morris, with his *Earthly Paradise* and other writings, is not merely "the idle singer of an empty day"; a Tennyson will still sing of the brotherhood of man; a Mazzini will work for a future when all will be prosperous and free, for, as Tagore put it so well in the Vancouver Conference a couple of years ago, there does exist "the divine right of man to transform the world to a perfect world for men." At times we all long

"to grasp this sorry scheme of things entire,
... shatter it to bits, and then
Remould it nearer to the heart's desire."

II.

THE WAY OUT ?

"Time is money, but leisure is wealth."—Tagore.

In my first address I mentioned a few of the major difficulties and uncertainties facing civilised man to-day, and pointed to education as the best hope for finding the key to the solution of many of our present problems. I expressed the belief that calm study and scientific investigation was the best line of approach, rather than attempting sudden changes in the organisation of society which had not been fully tried out and might easily result in catastrophe. It does seem to me that our unemployment problems are primarily questions of education. I would say the same regarding our crime problem, and also the problem of poverty and relief. Our economic and political problems ultimately fall into the same category.

In the world as it is to-day civilised man spends about two-thirds of his waking life in obtaining the means to live, in "making a living," leaving about one-third for what we may term leisure. The tendency during the last fifty years has been to limit and shorten hours of labour, and it may be that before very long these proportions will be reversed. Whether that will be a boon or a bane will depend mainly on the manner in which this freedom from labour is utilised. Possibly the shocking bungle in which we find ourselves to-day may be due to the fact that we have given too much time to the acquisition of life's equipment and too little time and thought to the best means of enjoying it. Doubtless you can all remember cases of people who have scorned delights and lived laboriously in order to provide leisure and comfort for their old age. When old age has come they find they have never learned how to live. They do not know how to spend their leisure,

and the enjoyments they expected prove to be merely dust and ashes. The hurry, worry and bustle involved in earning a living are with other unrestful attributes carried over from work to leisure, and the time that should be spent in quiet happiness is given to a mad pursuit of purchased pleasure, in which permanent satisfaction and enjoyment nearly always elude the pursuer. The knowledge of how to use leisure so as to get real enjoyment and recreation from it is not instinctive; it has to be acquired. Many fondly imagine that it can be bought or obtained by simply spending money on so-called amusements. Happiness is not so easily attained. The more she is consciously pursued the more elusive she is. Like appreciation in Art—whether of music or literature or painting or sculpture—the capacity for real enjoyment has to be practised and acquired, at least in the case of adults. With the young, and especially with the very young, the adoption of forms of enjoyment of leisure seems to be almost instinctive. With the older and more sophisticated, however, a mistaken conception of leisure often leads them on to the direct pursuit of pleasure under the false notion that it is something that can always be secured by being bought and paid for. The kingdom of happiness cannot be taken by storm. Happiness is not necessarily bound up with the spending of money, though I do not, of course, urge the miser's perverted view that happiness is necessarily bound up with the saving of money.

Life has been described as an ever-changing urge, expressing itself in a continual series of needs and wants. Satisfaction of these brings pleasure only for the moment, when another series of new wants succeeds, and in turn demands satisfaction. The pleasure experienced depends on the preceding need, and as a rule does not long outlive its satisfaction. This seems to be approaching perilously near to Schopenhauer's rather pessimistic philosophy.

"Man never is, but always to be blest." The Tantalus joke is that just as we are about to taste pleasure the cup is withdrawn, and we live on in the eternal hope, which in turn is eternally frustrated, that the future will be better than the past. The point is aptly illustrated by the writer of *Diogenes, or the Future of Leisure* (To-day and To-morrow Series). "Consider the young fool in love, and ten years later wrangling with wife and pestered with children on a seaside holiday, and you will be forced to agree with Shaw that the best definition of hell is a perpetual holiday." How utterly Shavian is this delightful inversion. Does he not also say somewhere that Folly is the direct pursuit of Happiness and Beauty?

It seems that man has always lived subject to either categorical or disguised imperatives. He has always been bossed by some higher authority. He is ordered about like a bewildered slave. From the time of the Biblical command, "Let there be light," to Omar Khayyam's poem, which opens with the injunction "Awake" and ends with another, "Turn down an empty glass," he has been subject to these commands. Omarism and Buddhism order us to do contradictory and impossible things—the one to regard the material world as the only reality and the other to regard the world of the senses as an entire illusion. Science orders us to live in accordance with her teachings, which are nearly as varied and incompatible as the different systems of philosophy. It may be psychology (as yet a pseudo science) or biology or physiology or hygiene or economics, but whatever it is we are asked to obey its imperative demands. Perhaps it is no wonder that, especially in recent times, Man's revolt against being subject to these continual demands has assumed alarming proportions. Free-will is ridiculous if it is understood as a claim that man can escape from the laws of his own nature. Yet men have been equally foolish throughout the world in their attitude to moral and

economic laws. I hope I shall not be regarded as unduly frivolous or lacking in reverence if at this point I tell you a couple of stories which seem to be appropriate to the question at issue.

The first story is that when the soul of the late Woodrow Wilson approached the golden gates the blessed St. Peter was on his annual vacation, and Moses was *locum tenens* at the gate. "How are the people of the world getting on with your fourteen points, Woodrow?" asked Moses. "I really don't know," replied Wilson, "but I do know that they have made a terrible hash of your Ten Commandments."

The second story is of a Scottish preacher who was explaining to his flock exactly what would happen on the Day of Judgment. The sheep were placed on one side and the goats on the other. The goats pleaded for mercy, "Laird, Laird, we didna' ken. We didna' ken"; but the Almighty grimly replied, "Weel, ye ken the noo. Awa' wi' ye to the brimstane."

Can man escape from the necessity of obeying these imperatives and commands? Must he obey the dictates of religion, morality, science and philosophy? There seems to be no escape, as some fondly imagine. The restraints are there, and the penalties for breaches of them must be paid. Within the law there is perfect freedom, but the law must be observed, though our understanding and interpretation of it have varied from time to time. The systems of morality as embodied in different religions illustrate the variation in the points of view adopted by different people. The same may be said of the different systems of philosophy. The development of the sciences and the changes in point of view due to our constantly-increasing knowledge illustrate the same diversity of thought. Sometimes we worship false gods and follow wrong theories. Man must continue the struggle towards fuller and higher knowledge, the pursuit of truth, and cling to the larger hope that "somehow good will be the final goal of ill."

Dr. Jacks in his book, *The Education of the Whole Man*, urges that we should be guided by our intuitions of what *ought to be* rather than by our perceptions of what *is*. He points to Astronomy as the science that teaches us to beware of exaggerating our own importance, and that the whole Universe is alive with the struggle of Order against Chaos. The theory is a beautiful one, but I cannot feel that intuition is a wholly reliable guide. Reason and educated imagination must play their part in the struggle. He says something to this effect: "Our perceptions *taken by themselves* are wholly misleading. Science systematises these and turns a crowd into a regiment, chaos into order, but the results must also be interpreted by intuition." There is force in this argument. The feeling that a judgment is true or false, right or wrong, is, however, not wholly a safe guide. The test of truth cannot be left wholly to intuition. The perception of the difference between what is true and what is false, between what has a right to be and what ought not to be, will always vary almost infinitely in different minds. I do agree with his contention that some unifying force is necessary to prevent the present disintegration of human society from continuing. He finds this unifying force in education, which he views as the long-sought "moral equivalent for war." The fear of war or the threat of invasion has in the past undoubtedly acted to keep peoples together in the face of what was regarded as a common danger. Remove this danger, as we are rightly endeavouring to do by our peace and disarmament proposals, but if you do not substitute an equally strong force, making unity essential, disintegration of society and disaster may easily ensue. Can a substitute for the old warfare between nations, with its attendant horrors, widespread misery and general inconclusiveness and uselessness, be found in a new warfare against ignorance and incompetence? Surely it is worth a trial. The difficulty is to get a whole people to realise the pressing danger of ignorance and in-

competence. It is useless to socialise the means of production unless man himself is socialised. An uneducated democracy is a contradiction in terms. In this new warfare we must mobilise the whole strength of the community. We must call to its service the energy, idealism, intelligence and courage of all, just as we had to do in the Great War. In order to succeed, each must feel that the cause is one worth fighting for and, if necessary, worth dying for. Can we succeed in making this indeed a world fit for heroes to live in? Let us try. What is the alternative that can save our civilisation from internal disruption and final ruin? Shall we revert to barbarous civil wars and possibly to further wars between nations, in which the painfully-accumulated results of the past may be destroyed? Can we really make education the moral equivalent for war, and make it the unifying force that will save civilisation from ruin? In the past the need for defence from attack from without helped to keep the people together. The dangers now threatening are internal. Can the people be made to realise how urgent is the need to face and remove these dangers? You will remember that sixty years ago Matthew Arnold, in *Culture and Anarchy*, pointed out much the same sort of thing. To effect the change, a new and more vital meaning must be assigned to education. It can no longer be regarded as a privilege of the rich or brilliantly endowed, but as a common heritage of all. It cannot remain the old type of academic and rather bookish education of the past, or an education of the mind merely, but must embrace the training and development of soul, mind and body equally. It must mobilise all the forces of industry, art, literature, religion and science in its service. It must be an education of man in his totality—spirit, mind and body—and it must be an education freely available for all, according to the full capacity of each. It must be an education not ending with school but continuing throughout life. It must be an education for citizen-

ship in the full sense of the term, specific, too, for a vocation, an education for leisure and recreation, in addition to that for a living. It must touch life from many angles. It must avoid one-sidedness, and not incur the foreigner's criticism of education at Oxford: "You train the minds of the young men in your lecture-rooms as though you meant them to become clergymen and their bodies in your football fields as though you meant them to become policemen." There should be a vital unity and correlation of the whole curriculum, which is still too much a series of unrelated subjects and activities. Manual training and Art should play a larger part than at present, especially in the post-primary stage of education. Unless knowledge eventuates in the acquisition of skill, its value is largely illusory. Especially attention must be given to health and to the acquisition of sound health habits. It is absurd and wasteful to try to graft an A1 culture on a C3 body. Body and mind are an inseparable unity, and there should be vigorous co-operation between them. If these things are not properly regarded, our civilisation, instead of rising, will decline to a lower plane, and once we start slipping the end will be catastrophe—*"Facilis est descensus Averni."*

Is the thought that the future salvation of mankind depends on education a vain imagining? Is it a Pisgah view, such as was vouchsafed to Moses? The idea of a State organised so that education is its chief concern is as old as Plato, and in the United States there are signs that the people there are more and more realising its essential value. About 400 years B.C., Plato, in his "Laws," developed the idea of an educational State, in which the Minister of Education was in virtue of that fact also Prime Minister. The view expressed was that education of the people was the first concern of the community and was the pivot of its fortunes. Education was a first charge on the resources of the community. After all, are not the young the fundamental

(if as yet undeveloped) assets of any community? Education should not be the sport of political vicissitudes or the economic necessities of the moment, as unhappily is too often the case nowadays in so many countries. The Greeks saw that clearly. The following quotation is *not* taken from one of the Sydney papers:—

“The insolence of demagogues is generally the cause of the ruin of democracies. . . . Sometimes they raise the upper and middle classes against them by seizing on private property or the public revenue, and dividing the proceeds in various forms of bribery and corruption. Sometimes they attack the rich by process of law, that they may have their property to apply to the support of their government. . . . Now, since oratory has been so much cultivated, men who are able speakers are the great demagogues.”

“The great instrument by which they accomplish their ends is the confidence of the people, and this they win by the hatred they display against the rich. . . . Changes occur also from the old form of democracy to the one still more democratic, in which no qualification is required either from electors or elected. In such cases demagogues aiming at power through flattery of the people bring matters to the pass that the populace become masters of the laws, and govern as they please.”

(This is taken from Aristotle's *Politics*, Book V, Chapter IV, written B.C. 384, and will be found in Tremembeere: *Principles of Government*, London, 1883, pp. 50-52.)

R. M. McIver says very truly in his book, *Community*: “It has been well said that ‘nothing is probably more dangerous for the human spirit than science without poetry and civilisation without culture,’ and the

life of the capitals of civilisation, ancient and modern, has often illustrated the truth of that saying."

Let us, however, skip the centuries and come to the world of to-day. Our schools are trying to do their part in making democracy safe for the world. We should, perhaps, at this stage try to state exactly what we mean by democracy. Millions of men lost their lives, empires were smashed, and the social systems, even of the victors, strained beyond recovery in the late war, which was fought to make the world safe for democracy.

Democracy—a "government of the people by the people for the people"—may be regarded as a form of social and political order which embodies our ideal of society. It should help all of its members to live full human lives. They should have the fullest opportunity of promoting their individual interests in conformity with and with due consideration for the well-being of others. The members of a democracy are identified with the common life of the nation, and they should be animated with the feeling of a common brotherhood and with the ideals of truth, justice and beauty, ideals which should find expression in the nation's laws and institutions. Democracy is thus the expression of an effort to secure a better social order, in which each individual will have an equal opportunity of fully developing his potentialities socially as well as individually, and in which injustice, fraud and wrong will disappear.

It is always difficult to make the real conform to the ideal, but surely democracy is a magnificent ideal well worth striving for. In English-speaking countries the desire for freedom is deeply rooted in our past history, and I shall not attempt to give the story of development of representative institutions.

Let us take the early nineteenth century as a starting point. The political reformers of that time demanded freedom of the individual to realise his interests with the least possible external interference. They tried to

sweep away the privileges of social rank and the restrictions on freedom imposed by an antiquated political and industrial system. These privileges and restrictions were regarded as violations of personal freedom. The struggle was to secure individual freedom industrially, socially and politically. This movement for individual democracy, as it may be termed, put an end to many anomalies and abuses, and improved the machinery of parliamentary government, as exemplified by the Reform Acts of the time. The reformers insisted that in any society the laws and institutions must advance the well-being of individual members. The only proper end of government, according to Bentham, is to try to secure "the greatest happiness of the greatest number." To secure this, all members of society in any rightly-organised state must have a say in the conduct of affairs. Government should be controlled by the governed, or at least in a form approved by them. All men were assumed to have equal rights—"Each to count for one and not more than one."

This form of individual democracy failed to bring about the millennium, as enthusiastic reformers predicted it would. In effect, its advantages were limited to those most favourably placed. The majority were too weak, too indifferent, too poor to maintain their rights. The manual workers were ignored and the commercial and middle classes generally favoured. "The higher and middle orders," said Macaulay, "are the natural representatives of the human race." "What are called the working classes," said John Stuart Mill, in 1861, "may be considered as excluded from all direct participation in the government." "The interests of every or any person," said Mill also, "are only secure from being disregarded when the person interested is himself able, and habitually disposed, to stand up for them." It was realised before long that individual democracy which stressed the pursuit of individual happiness had failed. Free competition was thought to be

a law of life. This failure led men to set their hopes on co-operation and social unity in place of individual competition. The workers abandoned Chartism for Trade Unions, and so we reach the position to-day when each section forms itself into a corporate body, each alike looking to the State for help. This may be termed social democracy, and under this system the State has become much more powerful and controls our lives and actions in a variety of ways, which by our grandparents would have been regarded as being an intolerable tyranny. Group action has largely supplanted individual action. The rise of the Labour Party everywhere shows that the manual workers are no longer politically impotent, but are able to play an important part in the life of a nation. Individual interests are merged in the interests of the group, and with this there has resulted a serious limitation of individual freedom. Freedom no longer implies being let alone to do as one likes, but rather an organisation to give one a greater opportunity to realise one's true interests. The modern ideal of social service has awakened a new sense of brotherhood, a loyalty to the group which must ultimately be extended to a loyalty to the whole State. It has also evoked a readiness to sacrifice individual interests for the sake of the common good. These admirable results are unhappily accompanied by a decline in individual morale and responsibility. Individuals become subservient to the crowd or the group, and a man will follow his Employers' Association or his Trade Union even against his better judgment, and generally from a sense of loyalty to it. The interest of the group is often an intensely selfish one and opposed to that of the community. That is the present position. The ideal of a democracy is surely brotherhood and justice. Each age has had its dominating ideal. "Among the Greeks and Romans it was courage or manliness; among the early Christians it was charity; in the Middle Ages, chivalry; in the eighteenth century, benevolence; to-day it is per-

haps what Mr. Leslie Stephen calls organic justice." (Professor Muirhead.) By organic justice, I take it, is meant the right ordering of society, so as to secure treatment for each individual according to his needs and the performance by each individual of his duty to society as a whole.

We need not go far afield to get examples of group action opposed to the general welfare of a community. Strikes and lock-outs are unhappily not yet matters of the past, and the recent elections in Great Britain were a striking, if extreme, example of the realisation by the whole community of the national danger that may easily arise from party government pursued for party purposes. Manifestly we are at the dawn of change and new developments in the ordering and structure of human society. What form the change will take is difficult to forecast. Both individual and social justice have their rightful places and the spirit animating the new form of social structure must be one of human brotherhood, in which duties or obligations will be stressed rather than individual rights. The spirit should be one of love, service and sacrifice—the sacrifice of merely individual interests to those required by universal brotherhood. In the realisation of this new spirit and the attainment of this new order of society, the schools must play their part. This spirit of service and self-sacrifice must be instilled into the minds and souls of our pupils by having not the forms merely, but the spirit of democracy in our schools. Life at school should, possibly on a higher plane, represent the life of the community. Thought for others, service before self, justice for all, freedom within the law accepted as the guiding rule to secure the common well-being, the encouragement of self-government—all of these should be part of the life of the school of to-day. Already much has been done in the direction of encouraging methods of self-government, in matters of self-discipline, in individual efforts in study, such as, *e.g.*, the

Dalton and Howard plans, and the like. The pupils must be imbued with an active faith in justice in its individual, social and abstract forms. The strong individualism, especially of the younger pupils, should be met by individual justice and perfect fairness to all on the part of the teacher. This will lead to the realisation of social justice, to the giving of help to each according to his needs, while the individual learns that he is not acting justly and rightly unless he is loyal to his school. The pursuit of truth for its own sake, readiness to sacrifice oneself for others, the desire to help others to overcome their difficulties, the attainment of happiness through service—all of these the school democracy should find it possible to realise before the pupils have finished their schooling. To train pupils in this way, to get them to enter into possession of their wonderful inheritance from the past, to help to develop fully the potentialities of each for good, to inspire them with worthy ideals both of work and leisure, this is the purpose of the high calling to which we as teachers have dedicated our lives. To me it is indeed the highest of all vocations, and I trust that strength may be granted to each of us to do our part worthily.

No matter how puzzled and bewildered we may be at the collapse of the world's economic structure and the comparative failure of the political system to adapt itself to rapidly-changing conditions, we can yet console ourselves in the thought that we are living in the heroic age of scientific achievement. What marvels the human mind has accomplished, both in the invention of the most wonderful machines and in the extension of our knowledge, whether to the infinitely great in the realms of space or in that of the infinitesimally small! We stand on the threshold of an age of even greater achievement, the realisation of which is endangered only by the possible warfare of nations and classes. Education which begets sympathetic understanding and is animated by high ideals is the only

means by which these dangers can be obviated and more real social justice secured. Ignorance breeds prejudice, suspicion and hatred, and its seeds must be sterilised before they can sprout. In the conflict with ignorance teachers hold the torch of enlightenment. They may be candles that light other candles while they are themselves consumed. Like the knights of old, it is theirs to ride abroad redressing human wrongs. Like Galahads they seek the vision of the Holy Grail, not by facing backward towards the past and mediævalism, but forward to a future surely rich with the promise of greater human happiness, to the vision of a society where the greatest happiness will be found in service to others and not in self-seeking. After all, remember, if democracy fails, we fail.

Shall I venture to indulge in an attempt to visualise the future way out of our present unhappy, unstable conditions? The attempt is too greatly daring, and I do not feel that I am qualified to make it. I shall therefore attempt briefly and very imperfectly to indicate a recent view expressed by Dr. Nicholas Murray Butler (who the other day was awarded the Nobel Prize for 1931) in one of those brilliant and thought-provoking addresses he all too occasionally gives. He reviewed first the older Eastern civilisations of which we have knowledge, and his view was that their decline was in a large measure due to their worship of the past and the nature of their religions. It was a habit of looking backward rather than forward to the future. Some of it survives to this day in the view that the golden age of human happiness was in the past, in ancestor worship as exists even in the present century among the Chinese, and in the view that the ultimate heaven for the human spirit was Nirvana—the absorption and annihilation of self in the divine ocean of utter forgetfulness. He dates Western civilisation to the rise of the Greeks and their philosophy, which induced faith in the future, in which human effort would ameliorate the conditions under

which man lives. This habit of looking forward and striving to improve conditions, however, led to an intense nationalism, in which boundaries for defence, armaments, tariffs and national suspicion, fear and animosity were dominating men's thoughts in every country. Each country prepared for war in order to defend itself or to extend its boundaries. Butler regards this stage as having ended with the Great War, and he opines that the world will now turn to internationalism in place of the older intense nationalism, that war will in the course of the years be abolished as uncivilised and unworthy of mankind, and that a stronger spirit of universal brotherhood will permeate mankind. The desire will be to help and not to oppress or exploit weaker nations. The effort will be rather to raise the standard of civilisation in all. The two new capitals of this new world will be at Geneva for the more positive work of this new movement and at The Hague for the settlement of international juridical questions. Surely this is a magnificent vision, and one worthy of the best efforts of all in order to realise it in practice. It is hoped that the World Disarmament Conference to be held next month will mark a great advance in this direction. If the efforts that in the past have been made in preparation for war can be diverted to channels that will improve the conditions of life for mankind—to the abolition of poverty, crime and sickness, to the cultivation of higher ideals of life—then this world will surely be a much happier place in which to live. The key that will open the door to the possibility of realising this is surely education of all peoples—education in its highest, broadest and best meaning. Of this new world, teachers are the evangelists if they will only rise to full possibilities of their high vocation.

"Say not the struggle nought availeth,
The labour and the wounds are vain,
The enemy faints not, nor faileth,
And as things have been they remain.

If hopes were dupes, fears may be liars;
It may be, in yon smoke concealed,
Your comrades chase e'en now the fliers,
And, but for you, possess the field.

For while the tired waves, vainly breaking,
Seem here no painful inch to gain.
Far back through creeks and inlets making,
Comes silent, flooding in, the main.

And not by eastern windows only,
When daylight comes, comes in the light,
In front, the sun climbs slow, how slowly,
But westward, look, the land is bright!"

(A. H. CLOUGH.)

III.

LITERATURE AND ART.

LITERATURE.

I shall open this address by quoting what to me is a short poem full of delight, by W. H. Davies, first published not so many years ago by Jonathan Cape (to which firm we owe so many good things), under the title *Collected Poems* (First Series) —

LEISURE.

“What is this life if, full of care,
We have no time to stand and stare.
No time to stand beneath the boughs
And stare as long as sheep and cows.
No time to see, when woods we pass,
Where squirrels hide their nuts in grass.
No time to see, in broad daylight
Streams full of stars, like stars at night.
No time to turn at Beauty’s glance
And watch her feet, how they can dance.
No time to wait till her mouth can
Enrich that smile her eyes began.
A poor life this if, full of care,
We have no time to stand and stare.”

As “heirs of all the ages,” we are the common inheritors of the wealth accumulated by mankind in the years of the past. Perhaps, indeed, of the many kinds of inheritance the past has handed down to us the greatest is our vast literary inheritance—an inheritance which the more it is shared the more it multiplies. It has many forms, both in prose and verse, in many languages, from the earliest attempts at mythology down to the wonderful flowering of the last three centuries. Poetry has been described as “the breadth and finer spirit of knowledge,” and many of you will remember Matthew Arnold’s claim that—“More and more mankind will discover that we have to turn to poetry to interpret life for us, to console us, to sustain us. With-

out poetry, our science will appear incomplete, and most of what now passes with us for religion and philosophy will be replaced by poetry."

What is the function of the teacher in regard to our wonderful literary inheritance? Assuming that the child has been taught to read, how can his appetite be whetted so that he will continue his reading, not for the purposes of obtaining information only, but for his own enjoyment? Of all who have received education, not only in the elementary schools, but even in our secondary schools and universities, the great majority are certainly not lovers of literature in any real sense. To obtain some knowledge of our literature is part of school education, but there is manifestly something amiss in our methods if the result is to leave so many, as is at present the case, with a distaste for further reading.

In the days of our youth reading in school was practically limited to a Reader containing mainly literary selections for each year or grade. This was read and re-read; the pronunciation, spelling and meaning of each word had to be known, and often the passages were parsed and analysed as well. In the revolt against over-insistence on formal grammar, about twenty years ago, a larger amount of reading was introduced. Children are now trained much more than formerly to express their thoughts freely and continuously, and they do read more widely than used to be the case. The delight and skill shown in creative work may be judged from the number of school magazines produced by children. The majority of the secondary schools in Victoria regularly print their own magazines, either each term or at least annually. In most schools these are produced by editorial staffs consisting mainly of the pupils. In this connection I might mention that what is regarded by many competent critics as the best school magazine in the world is *The Scotch Collegian*, commenced about 20 years ago when Dr. (then Mr.) W. S. Littlejohn,

formerly of Nelson, New Zealand, was appointed Principal of Scotch College, Melbourne. This magazine is entirely the work of the boys of the school, and throughout it has maintained an amazingly high standard. As an "Old Boy" I may be biassed, but I think the following lines by J. D. Burns, which have since been set to music, reach a height rarely attained by a school boy. They express the emotions roused by the insistent call for men and more men during the war, in which unhappily this promising boy gave his life:—

FOR ENGLAND.

"The bugles of England were blowing o'er the sea,
As they had called a thousand years, calling now to me;
They woke me from dreaming in the dawning of the day,
The bugles of England—and how could I stay?

The banners of England, unfurled across the sea,
Floating out upon the wind, were beckoning to me,
Storm-rent and battle-torn, smoke-stained and grey,
The banners of England—and how could I stay?

O England! I heard the cry of those that died for thee,
Sounding like an organ voice across the winter sea;
They lived and died for England, and gladly went their way.
England! O England! how could I stay?"

I like to think that these beautiful lines were partly inspired by Henley's poem, *Last Post*, which was included in an anthology of Victorian poets I had edited, which had been widely used in our schools about that time. You may recall the lines, which begin thus—

"The day's high work is over and done,
And these no more will need the sun:
Blow, you bugles of England, blow!
These are gone whither all must go,
Mightily gone from the field they won."

Free creative work is said to be the highest function of men, and surely the wonderful success of school magazines reflects the pleasure taken by our youth—girls quite as much as boys—in these creative literary efforts. It would be delightful to give more time to the discussion of school magazines, but the time for this

lecture, Literature and Art in Relation to Leisure, forbids.

In literature are embalmed the highest ideals of our race. The teacher's problem is how best to cultivate in the child the love of reading good literature. Much depends on the teacher's own attitude and real love of literature, and the inspiring example of a good teacher who loves literature and reads well cannot be overestimated. If a teacher does not take a real delight in literature and the teaching of literature, it were better that he (or she) had never become a teacher—at least of that subject. Even the best teachers fail to reach all their pupils and to kindle in them a glow of their own enthusiasm. How many of those who have passed through our hands carry with them a love of literature throughout their lives? We must confess, alas! that the great majority do not. Perhaps the cares and troubles of our work-a-day world blight the tender plant. With the increased leisure which the future apparently holds in store, the call becomes more insistent that the school must implant and foster in the young a love of the beautiful, whether in art, music or literature, to interpret, to comfort and to inspire their lives. We must change our past defeats into victories, so that the following incident can no longer conceivably be true:—"What are you going to give her for her birthday?" "I thought of giving her a book." "Oh, don't do that: she has one already."

The fact is that reading must be a personal adventure or the salt goes out of it. The function of the teacher should be that of guide and adviser, but never that of director or commander. Books that have a strong appeal to adults often have no appeal whatever to children. Dr. Johnson's advice applies to the young even more than to the grown-ups—"A man ought to read just as inclination leads him, for what he reads as a task will do him little good."

I do not remember who it was that wrote: "It is a

capital error to suppose that because this or that book helps another it will help you in the same way; or because it is ranked as a masterpiece, or is put into a list, you are constrained to make it your friend." As Emerson says: "A man receives what he gives. What can we see or acquire but what we are? You have observed a skilful man reading Virgil. Well, that author is a thousand books to a thousand persons. Take the book into your two hands and read your eyes out, you will never find what I find." Nevertheless, the influence of the wise and inspiring teacher in encouraging good reading will always be a great factor. You may remember some of the instances given in that valuable report, *The Teaching of English in England*, issued about ten years ago. "The class mistress," said one witness, "nearly always makes the books she herself likes the most popular." A head mistress gave a list of the books bought by the girls for themselves during three years at a particular school:—Shakespeare, 540; Tennyson, 150; Pilgrim's Progress, 130; Scott, 30; Fairy Tales, 50; etc. A master says: "Among the older boys I have found beyond question the favourite author is Dickens," and adds: "Possibly the fact that I am myself a devoted Dickensian has its influence." Undoubtedly, for many teachers will tell you that Dickens is not popular generally with boys. This all leads up to the question of school libraries. No school nowadays should be without its own library, which should be added to year by year. Too often in Victoria the school library consists of a few books kept in a cupboard. This is not worthy of being termed a library. The English Report I have just quoted from mentions the case of a school in an industrial district, where, after an initial grant of £20 by the local education authority, the children by means of a halfpenny a week built up a library of nearly 2000 books in three or four years. While we may not be able to approach the schools of the United States, with their wonderful provision of libraries in separate

rooms in the larger schools, with teacher-librarians in charge, we should certainly do much more than we are doing. When forming school libraries, the lists of books that have been prepared will be found useful, and of the making of these lists there is, of course, no end. Some are based on the individual tastes of the compiler and others on either the results of votes or on statistics of books borrowed by children from libraries. Lists judged to be suitable for children of almost any age are easily procurable. You will find some in Mackaness' book, *Inspirational Teaching*; the P.N.E.U. issues valuable lists, as does also the London County Council Education Board, while researches such as that entitled *Children's Interests in Reading*, by Dr. A. H. Jordan (Chapel Hill University of North Carolina Press), are numerous.

The teacher who loves literature will naturally like to make his own choice, but the experience and judgment of others are valuable if only for reference and to ensure variety of good books suitable for all tastes. Young boys naturally like books of adventure, and some of you may remember Stevenson's essay in the volume *Memories and Portraits*, entitled "A Penny Plain and Twopence Coloured," in which he describes his boyish delight in reading Skilt's Juvenile Drama. Personally I have never seen any of the books mentioned in his list, which includes such intriguing titles as *The Red Rover*, *The Smuggler*, and *Three-fingered Jack, the Terror of Jamaica*. The last named may have suggested the wooden-legged pirate in *Treasure Island*, which has delighted so many generations of school boys. How many of you have read and enjoyed the so-called Deadwood Dicks in your youth? They gave you joy, they satisfied a craving for the sensational and an instinct of hero-worship—crude and perhaps perverted; but did they do any lasting harm? Frankly, I think not. In my school days it was the Harkaway Series, the secret reading of which in school time led to many impositions and punishments.

The school library should not, of course, contain rubbish, but books dealing with adventure should certainly be included. I mean books such as Stevenson's *Treasure Island*, Kipling's *Jungle Books*, Hawthorne's *Wonder-book for Boys and Girls*, Weyman's *A Gentleman of France*. Of modern writers, P. F. Westerman, Wodehouse and Strang seem to be favourites with boys, while Angela Brazil's books find special favour with girls.

One good plan for maintaining a supply of books in a school library is for each pupil on leaving school to present a volume inscribed with his name. It will be found that some will continue to do this annually, and so pass on to others increased opportunity for enjoyment they themselves have experienced.

In Victoria the late William Gillies, who had been a writer of school books, left his estate for three school purposes, one of which was "the encouragement of the art of reading aloud, leading, it is hoped, to an increase in the admirable pastime of reading aloud in the family circle." To enable rural schools to undertake special work in this important matter of reading aloud, a scheme of circulating school libraries has been instituted. Libraries have been established with the funds of the Gillies' Bequest, and an annual charge of £1 to cover the cost of replacements and transport enables a school to have on loan a yearly supply of at least 60 books. Each set of 60 books is chosen to give a well-balanced miniature library suitable for pupils of the lower, middle and upper sections of elementary schools, and these are sent, 20 at a time, at the beginning of each term. Each set costs about £6, and three-unit sets (180 volumes) cost about £18. This gives 180 titles and a three years' supply for any one school, while three-unit sets supply nine schools each year. The scheme has only recently been started, and promises to form a valuable supplement to the inadequate libraries found in most country schools.

In larger schools modern practice favours a separate

library for each form, readily available in the form room for reading and reference.

A love of reading cannot be forced, nor does the pursuit of knowledge necessarily bring happiness. The pessimist in Ecclesiastes was profoundly convinced that in much wisdom is much grief. "He that increaseth knowledge increaseth sorrow" is echoed by Byron—

"Knowledge is sorrow. They who know the most
Must mourn the deepest o'er the fatal truth.
The tree of knowledge is not that of life."

We are all pessimists at some moments in our lives. The physiologist may say this mood is due to our livers or to the imperfect functioning of our ductless glands. Knowledge and sorrow may be inextricably interwoven, but we still find delight in the pursuit of knowledge, and we still believe that wisdom lingers. As with other kinds of love, that of poetry cannot be forced, but if it can be freely engendered it will be found to be not a mere palliative of life's worries, but a dynamic force interpreting and re-creating life, and leading it to higher forms of happiness and power. The pursuit of knowledge only may atrophy the emotions, but poetry enriches our emotional life. In cultivating in the young an appreciation and understanding of our vast literary inheritance the teacher has no easy task. Do not start with the classics, but you have not been truly successful if you do not end there. Nor is it wise to talk down to the child. As Emerson says, "The great authors never condescend." It is an accepted fact that all matter is mutually attractive, and what we call the force of gravitation pervades the universe. It may be an ultimate fact also that all spirit is mutually attractive, and this may explain the universality and permanence of those works we call classics. The works of a Shakespeare or a Milton acquire a new significance with each age, and yet retain the noble imprint of the original minds that created them long after the age in which they were written has passed away. A knowledge of

the classics, then, should not be a mere ornament of education; it should inform and vitalise every part of it.

I should like, before leaving this brief discussion on Literature and Leisure, to quote a passage from Ernest Raymond's book, *Through Literature to Life*. "As an art," he says, "literature is an expression of the responses of the human mind to all the stimuli of the personal world of men." To one—

"The meanest flower that blows can give
Thoughts that do often lie too deep for tears."

To another—

"Under the bludgeonings of chance
My head is bloody but unbowed."

And yet to another—

"Give to me the life I love,
Let the lave go by me,
Give the jolly heaven above
And the by-way nigh me.
Bed in the bush with stars to see—
Bread I dip in the river—
There's the life for a man like me,
There's the life for ever."

The passage in Raymond's book that appeals so strongly to me appears near the end after the chapter entitled "*Lacrimæ Rerum*"—the pain of things—the tears that are due to human suffering and to the overthrow of mortal hopes. He quotes S. R. Lysaght's sonnet from his book *Poems of the Unknown Way*. The following is part of it:—

"If love should count you worthy and should deign
One day to seek your door and be your guest,
Pause, ere you draw the bolt and bid him rest,
If in your old content you would remain.

.....

He wakes desires you never may forget,
He shows you stars you never saw before,
He makes you share with him for evermore
The burden of the world's divine regret.
How wise were you to open not. And yet
How poor, if you should turn him from the door."

Raymond then touches upon those poems sounding the notes of pessimism so characteristic of Mr. Aldous Huxley and the younger poets of to-day. So many of them echo William Morris' discontent with his own time—

"Of Heaven or Hell I have no power to sing,
I cannot ease the burden of your fears,
Or make quick-coming death a little thing,
Or bring again the pleasure of past years,
Nor for my words shall ye forget your tears,
Or hope again for aught that I can say,
The idle singer of an empty day."

Raymond, on the other hand, finds in the zest of life a creed which rises above this pessimism. He holds that, after all, life has more on the credit side than on the debit side. Here, then, is the passage I wish to quote:—

"In all living things there is a boundless excess of life over the needs of living; that is the fundamental fact. And this ebullient excess, in trees and hedgerows, bursts into flower; in larks and nightingales, into a cataract of song; in children, into romping and shrieking and laughter, or into the most wonderful day-dreams or the vividest make-believe; in adolescent youths, into ragging and rough-housing or into towering ambitions and splendid egotism; in men and women, into hobbies, into enterprises, into voyagings, into research, into art, into sport, into dancing, into good works, into long, impossible dreams. . . . In the last audit of life we credit them with immeasurably less than their due."

This joyous over-plus is surely the antidote to pessimism, and remember, too, that man is the only animal that laughs. How happily Masefield expresses this thought—

"Best trust the happy moments. What they gave
Makes man less fearful of the certain grave,
And gives his work compassion and new eyes,
The days that make us happy, make us wise."

Let us take these words as a motto to carry away from this summer school and its beautiful surroundings.

"The days that make us happy, make us wise."

ART.

"No Art, no culture: no culture, no Nation."

Let us now turn to the world of Art and our wonderful inheritance there.

"All passes. Art alone
Enduring stays to us.
The bust outlasts the throne;
The coin, Tiberius."

AUSTIN DOBSON

(imitated from Théophile Gautier).

I shall not attempt to define Art. There are many definitions and many different interpretations. The application of skill to the production of the beautiful, whether by imitation or by original design, as applied to Architecture, Sculpture, Painting, and the Decorative Arts and Crafts, will indicate sufficiently the scope of the subject I can only touch the fringe of to-day.

As T. J. Cobden-Sanderson remarks in *Art and Life*, "Art implies a certain exalted environment," and it may act as a stimulus to make out of the routine of our daily needs "a beautiful exercise of our gifts of fancy and invention." Apply this, for instance, to the bride or the housewife who is trying to make the home a place of beauty in which to live. Whether it is the curtains or the carpets or the china, the furniture or the pictures, individual taste and the exercise of such artistic feelings as each has enters into all and gives great individual satisfaction. As an active function of human imagination, "Art is not limited to the creation of isolated objects of beauty."

Perhaps I have already sufficiently indicated what we mean by Leisure. Leisure that is enforced we may here omit from consideration. The importance of training for the right use of leisure and the danger of its misuse

or abuse have already been indicated. Unless, by means of education, proper preparation is made for the worthy use of leisure, there will be great rejoicing in the ranks of Beelzebub at the increasing amount of leisure made available through the use of machinery.

The harassed business man or worker in office, field or factory may regard leisure as freedom from ordinary work. To him it is an Elysium where he can dream of idleness in a state of rest and forgetfulness or where he can indulge in games and sport to his heart's content, or in amusement or in travel. To many, however, the spending of such free time in music, literature, art, craft work, or some congenial creative occupation, is the supreme relaxation. It is more and more the concern of education to prepare the individual for whole living—to live life generously and broadly, to carry out the duties of his work with skill and to use his leisure well. If properly directed and encouraged at the right time, the arts which create beautiful things will occupy the thoughts and skill of thousands throughout life. Art in its various forms and processes has through the ages been the expression of the peculiar or notable traits of individuals, and therefore to some extent expresses the principles and motives that influence the life and progress of a nation.

For full satisfaction life is too short to enable us to reach our own standard of perfection in the exercise of any artistic craft. Does not Chaucer refer to "the life so short, the craft so long to learn"? The satisfaction its exercise gives is well expressed by Kipling in one of his dedications—

"Who, lest all thought of Eden fade,
Bring'st Eden to the craftsman's brain,
Godlike to muse o'er his own Trade
And manlike stand with God again."

Art remains have generally been used as the measure to estimate the height to which past civilisations have risen. It is a definite form of expression, which has

varied greatly in different ages. If we desire to improve the artistic taste and skill of our people, we must begin early, when the mind is plastic and will readily take and retain impressions. From this point of view, the dissemination of a knowledge of art and imparting of artistic skill is both the responsibility and the essential duty of education authorities. Some knowledge of the history of art, some æsthetic appreciation of art, are thus essential as part of art instruction in schools. Education must aim at the acquisition of skill in some of its almost innumerable socially-valuable forms, of which Art is a very important one. So far as it fails to eventuate in skill, it is only half-grown, and leads inevitably to insincerity and cant. A modern school building should always be a fine piece of architecture designed to serve well the purposes for which it is intended. Each class-room should be a good place in which to study, to learn, to live, and to teach. It should be beautiful, with well-chosen art pictures on its walls, and the teachers should be qualified to give short but accurate descriptions of each picture and its meaning, purpose, and possibly also its artistic significance.

Nearly every country throughout the world has in recent years transformed its methods of art teaching. In elementary schools, reliance is no longer placed solely or even mainly in line drawing but mass and colour play an important part. Cizek in Austria has shown what remarkable results may be obtained with quite young children and the results obtained with pastel work in elementary schools in Victoria have been amazing. Exercises in drawing and design, whether with pastel, crayon, pencil or brush make clear refinements of proportion and form, the relation of material to purpose and the value of restraint in decoration and colouring. All this leads to a higher capacity for self-enjoyment and to the giving of enjoyment to others. It is a form of expression that gives special pleasure to the individual as well as to others and ultimately leads

to higher standards of taste and of living. It supplies creative ability to crafts and other forms of industry, and so tends to bridge the unhappy antithesis that so often exists between work and leisure. Art trains the child in taste and diffuses the love of the beautiful through the school and its environment; this is carried over to the home, where this developed taste is reflected not only in its decoration, furnishings and surroundings but also in matters of dress, and in such things as table decorations, the serving of meals, and the like. Later on this influence is extended to the wider circle of civic life with the city's architecture, its parks, gardens, galleries, and monuments, all leading to the greater enjoyment of leisure and the creation of a finer civic spirit. Art training thus creates wider opportunities not only of direct usefulness but of pure enjoyment in the skill of the artist and craftsman. Architecture, gardening, sculpture and painting take on a new meaning, and national parks, galleries and museums become desirable places to visit often for study and pleasure during leisure hours. For those with some, even scanty, knowledge of the history of architecture, the public buildings, churches, and even private residences, have added interest as the style of architecture is recognised and linked with the past. Nature herself assumes new aspects when seen through the eyes of a painter, her many and varied moods and harmonies are appreciated, and the resulting artistic enjoyment is self-revealing in leisure, disclosing a second and finer self.

There is a strong bond between history and art, and it may be that the associations of art in the past have led to some antagonism or indifference to it in the present. This, however, should not be true of new countries such as Australia and New Zealand. The great arts of Architecture, Sculpture and Painting, have been referred to by William Morris as the "handmaidens of luxury, tyranny and superstition." School books describe some magnificent building as the palace of this

Emperor, a beautiful group of statuary as the property of that Pontiff, or a wonderful painting as done to the order of some tyrant of an Italian State in order to give pleasure to the leisure hours of the noble and wealthy. This may all be true, but we know that these masterpieces were the work of craftsmen who often left no name behind them, but their work remains to mark some new progress in architecture or in art, and to give delight to thousands in succeeding generations. So it is too with the lesser arts by which men throughout the ages in the pure joy of creation have striven to beautify the familiar articles of every-day life, such as pottery, furniture, smith's work, glass-making, etc. As William Morris further says, there is indeed scarcely anything we have in use and that we fashion but is thought to be unfinished till it has some artistic touch or other decoration about it. True, in many cases, we have become so used to ornament that it is taken for granted as if it had grown of itself. Sometimes it is overdone. We are prone to grow accustomed and indifferent to either artistic or spiritual slovenliness. Yet all decoration should have a use and a meaning, and everything made by man has a form which must be either beautiful in some degree or ugly. "Beauty is truth, truth beauty—that is all we know on earth and all we need to know." Our eyes quickly become dulled by the forms of things we constantly see, and so the designers endeavour to awaken our dulled perceptions by attractive or perhaps intricate patterns so that we may find delight in the new, the different and the varied appearance of manufactured objects, just as in nature we find pleasure in the constantly changing aspects of a green field, a river bank or the colouring and form of a mountain range. The arts have been practised for centuries, and it would appear that no state of society, however ancient, has ever been entirely without them. William Morris stresses the permanence of artistic forms. It is perhaps no exaggeration to say to-day that no man, however original he may be, can design the ornament of a cloth,

the form of a piece of pottery, or a piece of furniture that will be other than a development or a degradation of form or unit of pattern used hundreds of years ago. Forms that once had a serious meaning, or were the insignia of rank, or mysterious symbols of worship, have now become the unit of design to decorate some form of craft practised in our leisure. "These slow and mature productions of past leisure or work are of immense value to man," as Tagore expressed it at the recent conference in Vancouver, and again, "All civilisations are living wealths that have been harvested from the deep soil of leisure." Through objects of art we can look upon the life of the past. We can go in the tracks of the nomads, we can see the beginnings of nations, we can learn something of the terrible Empires of the ancient East; we can admire the glory that was Greece and the grandeur that was Rome; we can trace the growth of Islam, the Crusades, the life of the Aztecs or of the Incas, and the foundation of modern Europe. We can get a glimpse of the far-off days of Hammurabi, the Edomites and the ancient Egyptians. Art, then, as Morris puts it, is the expression of man's delight in beauty; it has been alike the glory of free nations and the solace of the oppressed; religion has at different times and places elevated, abused and degraded it. Education now regards it as an essential in the curricula of schools. It is the sweetener of human labour to the craftsman whose life is spent in fashioning some artistic product, and the sweetener of leisure to the people who enjoy the beauty of the finished work. Art makes our toil happy, our leisure profitable, and our rest peaceful. After all, we are all artists, more or less, and God grant us joy in our work, until the time comes that Kipling speaks of—

"(When) only the Master shall praise us, and only the Master shall blame;

And no one shall work for money, and no one shall work for fame,
But each for the joy of the working, and each in his separate star,
Shall draw the Thing As He Sees It, for the God of Things As
They Are."

IV.

SCHOOL CLUBS AND HOBBIES.

Education being mainly a preparation for complete and worthy living, it should result in equipping the individual with developed powers and aptitudes not only for the purposes of earning a livelihood, of carrying out the duties appertaining to citizenship in a modern state, of maintaining or helping to maintain a home and bringing up his family in a worthy manner, but also of utilising his leisure in a worth-while way. Indeed, education may fitly be described as the great adventure of trying to make ourselves at home in the modern world. A recent writer states, "The first duty of education is to teach people to do better the desirable things they are going to do anyway. Another duty is to reveal higher types of activities and to make them both desired and to an extent possible." The problem then is really to make people *want* to do those things that are of good report and worthy, and *not want* to do the opposite.

Much time and thought have been given in all countries to curriculum revision with the object of making the ordinary class-room work function more directly and more effectively in realising our modern conception of the aims of education. The tendency towards correlation of subjects instead of the older treatment of them in water-tight compartments is one evidence of this movement towards greater unity. The treatment of generalised science with pupils up to the age of 15 or 16 years instead of beginning separate sciences, and also the development of what has been called the "project method" is another. The latter necessarily carries the pupil's thoughts and investigations beyond the school itself to the life of the community and the home. It all helps to give reality and purpose to the work of the school, to make the child realise the meaning of the

work, to awaken and sustain his interests, and to make him feel that he is satisfying real needs which he experiences and understands.

In this connection school clubs and hobbies play a very important part. Both are in the nature of community or group adventures, but hobbies make a stronger individual appeal. These "extra-curricular" activities, as they have been termed, have very high educational values which many people are only beginning to realise. The growth of these movements in recent years has been truly amazing. Indeed, it will soon be impossible to imagine a school—even the smallest school in the remotest part of the country—where some of these activities will not be found in operation. Bird clubs, nature study clubs, gardeners, Boy Scouts, and Girl Guides—even if they are lone Scouts and Guides—reading clubs, and the like, can be formed anywhere. As an indication of the extent of this movement I shall quote the following list of sixty clubs which were operating at the Washington Junior High School at Rochester, in the State of New York, when I was abroad nine years ago:—

Information concerning the various clubs is given under the headings (a), Activities; (b) Objectives; (c), Conditions.

Airplane Club.

- (a) Making of a scaled miniature of an actual flying model.
- (b) Interest in and study of the art of flying.
- (c) Expense for material about \$2.00. Maximum membership, 20.

Athletic Club (Boys).

- (a) Games and athletic work.
- (b) Recreation, fair play, quick response.
- (c) Maximum membership, 30.

Athletic Club (Girls).

- (a) Games and athletic work.
- (b) Recreation, fair play, quick response.
- (c) Maximum membership, 40.

Basketry Club.

- (a) Making articles of raffia and reed.
- (b) Knowledge of uses of raffia and reed; hand skill.
- (c) Expense varies according to articles made; minimum 40 cents. Maximum membership, 15.

Bird Club.

- (a) Exchange of experiences relating to bird life; personal observations, newspaper reports, lantern slides, out of door excursions in May and June.
- (b) Familiarity with bird life.
- (c) Expense involved—voluntary purchase of Audubon leaflets (10 cents). Maximum membership, 30.

Boys' Series Club.

- (a) Reading and discussion of boys' books.
- (b) Better understanding and selection of boys' reading.
- (c) Limited to boys interested in character-building books.

Camera Club.

- (a) Making of solution; developing and printing of films and plates; making enlargements.
- (b) Knowledge of photography.
- (c) Dues—20 cents per term for solutions and use of apparatus. Printing paper used must be paid for in addition. Apparatus broken must be replaced. Maximum membership, 15.

Camp Craft Club.

- (a) Camp life—preparation and realisation; making of camp kits.

- (b) Training for emergency and pleasure.
- (c) Expense—50 cents. Maximum membership, 15.

Camp Fire Girls.

- (a) Holding of business meetings, council fires, parties, etc.; studying for honours, ranks, etc.
- (b) Pursuit of health, happiness, and beauty.
- (c) Twenty weeks of probation required. Applicant must have B average on report cards and be recommended by one teacher. National dues, 50 cents. Each girl earns the money in her own way.

Cartooning Club.

- (a) Production of drawings and cartoons.
- (b) Interest in drawing; skill in producing thoughts on paper in serious or humorous form.
- (c) Applicant must submit a sample of his work and be accepted by the club director. Maximum membership, 25.

Chemistry Club.

- (a) Chemical experiments demonstrated by members of club and discussed by director.
- (b) Knowledge of simple chemical phenomena.
- (c) Voluntary subscription for chemical material. Maximum membership, 30.

Crochet Club.

- (a) Crocheting of laces, yokes, etc.; stories read aloud while work is in progress.
- (b) Hand training; saving of expenses in purchase of laces, etc.
- (c) Members must provide their own materials. Maximum membership, 20.

Debating Club.

- (a) Debates upon questions of public interest.
- (b) Acquaintance with rules of debating; ease and fluence in public speaking.
- (c) Maximum membership, 20.

Dramatic Club.

- (a) Dramatisation of short plays and stories; preparation for assembly programmes.
- (b) Interpretation, clear enunciation, knowledge of stage business.
- (c) All members given an opportunity on one assembly programme at least. Personnel of club changed every ten weeks. Maximum membership, 25.

Embroidery Club.

- (a) Embroidery, readings, and Victrola selections.
- (b) Knowledge of design, good materials, etc.; pleasure in making of beautiful and useful articles.
- (c) Members must furnish their own materials. Maximum membership, 35.

Ernest Thompson-Seton Club.

- (a) Acquaintance with the life in the big woods; knowledge of characteristics, habits, and adaptability of wild animals through Seton's stories.
- (b) Increase of interest in wild animal life.
- (c) Maximum membership, 25.

First Aid Club.

- (a) Study and demonstration of principles of first aid; making first aid kits.
- (b) Knowledge of first aid; ability to act in an emergency.
- (c) Dues—5 cents per member. Maximum membership, 25.

Folk Song and Dance Club.

- (a) Learning of old folk songs and dances.
- (b) Teaching of grace and keen sense of rhythm.
- (c) Ballet slippers required. Maximum membership, 24.

French Club.

- (a) Introductory work in conversation French; story of France and its people.
- (b) Broader knowledge of languages.
- (c) Limited to students not in French classes. Maximum membership, 25.

Handicraft Club.

- (a) Working with raffia, Indian stitch, beads, applied design.
- (b) Training of eye and hand.
- (c) Girls in advanced classes of vocational department eligible. Expense varies according to article made. Maximum membership, 15.

Home Economics Club.

- (a) Distributing food prepared by classes; apportioning of food; setting tables properly.
- (b) Training in responsibility and home service. Maximum membership, 10.

Home Nursing Club.

- (a) Knowledge of bandaging; care of sick and little children; visits to hospitals.
- (b) Training for home nursing; home emergency, welfare work.
- (c) Maximum membership, 20.

Illustrators' Club.

- (a) Making illustrations—pen and pencil sketching.
- (b) Development of talent; training of eye and hand to work together.
- (c) Applicants for club must submit free hand drawing to director. Maximum membership, 20.

Kipling Club.

- (a) Reading and discussion of Kipling and other modern writers.
- (b) To instil a love for fascinating modern tales of men and animals.
- (c) Maximum membership, 20.

Kite Club.

- (a) Making of kites.
- (b) Study of proper proportions of kites and use of hand tools.
- (c) Expense of kites—20 to 30 cents. Maximum membership, 15.

Knitting Club.

- (a) Knitting of any garments desired.
- (b) Learning of various stitches and new uses of yarn.
- (c) Each member must supply her own yarn and knitting needles.

Know Your City Club.

- (a) Discussion of facts concerning Rochester; industries, public buildings, wage average, etc. Visit to places of interest.
- (b) Knowledge and appreciation of our city.
- (c) Limited to eighth and ninth grades. Maximum membership, 25.

Landscape Gardening Club.

- (a) Principles of landscape gardening; recognition of common shrubs and trees; study of gardens through pictures and trips.
- (b) Love for good landscape gardening; stimulation of desire to become landscape gardeners.
- (c) Maximum membership, 15.

Laundry Club.

- (a) Quick methods of washing and ironing; study of lines, materials, and temperature of water.
- (b) Development of artistic sense; respect for labour.
- (c) Maximum membership, 12.

Martha Washington Club.

- (a) Crocheting of beautiful rugs from coloured rags at home uses; gaining knowledge of colonial period.

- (b) Development of thrift; home service.
- (c) Maximum membership, 15.

Military Club.

- (a) Drilling and study of manual of arms, signalling Morse code and semaphore.
- (b) Training for promptness in executing orders; knowledge of signalling.
- (c) Membership limited to 32 boys who are interested in marching and signalling.

Millinery Club.

- (a) Making and trimming hats.
- (b) Knowledge of the trade method of making a hat.
- (c) Expenses vary from two to three dollars, according to hat made. Limited to eighth and ninth grades. Maximum membership, 15.

Musical Association Club.

- (a) Discussion of simple music forms, instruments, and best compositions. Use of Victrola records and actual performance.
- (b) Intellectual enjoyment in listening to music.
- (c) Maximum membership, 20.

Mythology Club.

- (a) Reading and discussion of stories concerning Greek and Roman mythology, heroes, customs, and manner of living.
- (b) Knowledge of early beliefs and superstitions.
- (c) Maximum membership, 30.

Newspaper Club.

- (a) Make up and production of modern newspaper.
- (b) Reading of newspaper and magazine articles; trips for observation; oral and written reports.
- (c) Maximum membership, 15.

Orchestra Club.

- (a) Furnishing of music for assemblies, plays, commencement exercises, etc.

- (b) Complete personnel of every orchestra instrument; training in school spirit.
- (c) Gold pins for all who serve three terms. Maximum membership, 40.

Pottery Club.

- (a) Modelling in clay; objects in relief and round.
- (b) Study in form in three dimensions of space; hand skill.
- (c) Small expense for clay and tools. Maximum membership, 20.

Public Speaking Club.

- (a) Recitation of fine selections and original speeches.
- (b) Training of members in public speaking.
- (c) Maximum membership, 15.

Puzzle Club.

- (a) Making and solving puzzles; puzzles made given to convalescents in hospitals.
- (b) Training in keenness, accuracy, individuality, service.
- (c) Dues—10 cents. Maximum membership, 15.

Radio Club.

- (a) Study of wireless telegraphy; practice in sending and receiving messages.
- (b) Knowledge of wireless.
- (c) Club limited to boys and girls in eighth and ninth grades. Maximum membership, 15.

Red Cross Club.

- (a) Making over clothes and knitting for European war orphans; affiliated with the National Red Cross.
- (b) Development of altruistic spirit; service.
- (c) Maximum membership, 15.

Reporters' Club.

- (a) Discussion of newspaper and magazine articles; trips for observation; oral and written reports.
- (b) Development of habits of observation; concise forms of expression.
- (c) Occasional car fare. Maximum membership, 15.

Santa Claus Club.

- (a) Construction of toys.
- (b) Making of playthings along scientific lines.
- (c) Small expense dependent on toys made. Maximum membership, 15.

Scrap Book Club.

- (a) Making scrap books of pictures and articles for entertainment of sick children in hospitals.
- (b) Service for others.
- (c) Expense—10 cents for scrap books. Maximum membership, 20.

Senior Corps (Boys).

- (a) Discussion of topics of interest to graduates; conducting of school campaigns.
- (b) Knowledge of conditions to be met outside Junior High; service.
- (c) Membership limited to boys of graduating class.

Senior Corps (Girls).

- (a) Discussion of every day affairs; conducting of school campaigns.
- (b) Making prominent the reasonableness of honour in all relations of life; service.
- (c) Membership limited to girls of graduating class.

Short Story Club.

- (a) Reading of short stories.
- (b) Acquaintance with best short story writers.
- (c) Maximum membership, 12.

Social Hour Club.

- (a) Knowledge of etiquette for society and business.

- (b) Increase of social efficiency.
- (c) Maximum membership, 20.

Spanish Club.

- (a) Simple conversation; a short play; songs.
- (b) Knowledge of vocational opportunity through Spanish.
- (c) Of special interest to the commercial department, as our Rochester firms do business with South American firms. Maximum membership, 15.

Story Telling Club.

- (a) Telling of stories.
- (b) Creating and fostering a love for good stories.
- (c) Maximum membership, 25.

Success Club.

- (a) Talks by successful men; examples of worthwhile men; discussion by club members; contact with industrial life.
- (b) Understanding of basic principles of success.
- (c) Membership limited to boys who will not complete Junior High.

Swimming Club (Boys).

- (a) Strokes, dives, life saving, swimming meets.
- (b) Enjoyment; preparation for emergencies.
- (c) Maximum membership, 20.

Tatting Club.

- (a) Copying and making of original designs in tatting.
- (b) Artistic and practical side of hand work.
- (c) Each member must have shuttle and thread. Maximum membership, 20.

Travel Club.

- (a) Imaginary trips by means of stereopticon views.
- (b) Appreciation and knowledge of actual travel.
- (c) Maximum membership, 30.

Violin Club (Beginners).

- (a) Learning to play on violin.
- (b) To convince child of his ability to learn violin.
- (c) Membership limited to 15 who have a violin, but do not take violin lessons.

Violin Club (Intermediate).

- (a) Lessons in violin playing.
- (b) Training for pleasure.
- (c) Membership limited to 15 who have not had one term in the Beginners' Club and do not take private lessons.

Violin Club (Advanced).

- (a) Advanced lessons on violin.
- (b) Training for orchestra and individual pleasure.
- (c) Membership limited to 15 who have one term in Intermediate Club and do not take private lessons.

Wild Flower Club.

- (a) Learning names of wild flowers; collecting for herbariums; using nature to beautify the home.
- (b) Appreciation of the wonder and beauty of the great outdoors.
- (c) Expense—a small note book for herbarium and 2 cents for *passe partout*. Maximum membership, 25.

Willing Workers' Club.

- (a) Making articles of clothing for small children, e.g., simple dresses, aprons, bonnets, etc.
- (b) Giving garments to poor children; service.
- (c) Maximum membership, 15.

Wireless Builders' Club.

- (b) Working knowledge of wireless.
- (c) Limited to students interested in wireless and willing to pay the cost of materials for own apparatus. Maximum membership, 15.

I do not claim to know when or how these movements originated. In some form or other clubs are probably as old as schools, and their development—often surreptitiously—in boarding schools seems obvious. Apart from games, which have always been a feature in English education, the clubs of my own youth which I recall are the "Jam Club," of a group of boys to supply jam in turn at the evening meal at a boarding school, and others of a similar nature. Some of these clubs were tolerated though not officially recognised.

It is only in recent times that those movements have made such wonderful strides. Their rapid development in day schools in recent times has been concomitant with increased psychological research, especially as regards individual interests and aptitudes, new views regarding education and the growth of self-government in schools. The subject is so vast that I shall be able to touch upon some aspects only. I hope you will forgive me if I take my own State of Victoria, which I know best, in the following descriptions. I am, of course, aware that the whole movement is a widespread one, and it may easily be the case that in New Zealand you have gone much further in this direction than we have in Victoria or in the other States of Australia. Nor can I do more than give brief indications of some of the branches of this movement in Victoria.

For educational administrative purposes, Victoria is divided into 29 districts, each containing approximately 100 schools under an officer known as the District Inspector. Each district contains approximately 400 teachers and 8,000 pupils. A School Committee is elected for each school by the parents of children in attendance. The system of having a Committee for each school was adopted from the New Zealand practice by the then Director, Mr. Frank Tate, nearly 30 years ago. I shall take the Ballarat district as an example of district work, and if special attention is given in my account to the smaller schools, you will readily understand that the

formation of school clubs and the cultivation of hobbies are developed to a greater extent in the larger schools where the numbers are greater and better facilities exist.

Teachers in our schools are free to use one period of half an hour in each week for any extra-curricular purpose he or she may wish. It may be used for special singing, for recitations, for debates, or various other activities. It is called a "free" period, though this is really a misnomer, as it is usually one of the busiest periods in the week.

In the Ballarat district about five (5) years ago, the District Inspector and teachers after a discussion at a group meeting (of teachers and Inspector) decided to try the experiment of devoting this half-hour period per week to the cultivation of hobbies. The response of the boys and girls was remarkable. Their zeal and intelligent interest soon convinced the teachers that they were on right lines. Encouragement was given to each boy and girl to follow his (or her) own bent and interest. The work was developed under the guidance of the teacher, and it was naturally to be expected in the early stages of this experiment that the special departments of hobby work in which the teachers had special proficiency and interest were prominent in different schools.

So great were the interest, ingenuity, variety and skill shown by the children in their displays on Parents' Days, and so proud were the teachers with the results that when the Ballarat Exhibition Commissioners decided to cover all expenses for a public exhibition of the work, the schools of the district co-operated in making the exhibition a great success, and it has become a regular annual feature. At the first exhibition in 1928 there were over 100 items listed; since then the numbers run to several hundreds.

One lesson learned was that the adult was unwise to presume that he knew beforehand the direction in which the pupil was likely to turn to express his in-

terests. Very great public interest was aroused, and so great was the impression made that the Exhibition Commissioners decided to award annually scholarships to enable the winners to pursue further their hobbies at the Ballarat School of Mines and the School of Arts. I shall not weary you with a list of the classes of exhibits. As might have been expected in this scientific age, wireless sets and model aeroplanes were present in great numbers. The boys of one school made a printing press from a discarded one, and turned out quite good work. The work of the girls showed equal variety and range. Perhaps best of all was the manifest pride taken by the pupils. They looked on the exhibition as their own.

Let me now turn to a natural extension of hobby work which has developed largely in connection with what are known as Home Projects in connection with Agriculture and Horticulture. The course of observation work in Nature Study in the lower grades leads naturally in the upper grades to a more systematic study of the elementary principles of agriculture and horticulture. In Victoria the teachers have formed what is called the State Schools' Horticultural Society, mainly for the encouragement of school gardens. The Department pays the salary of the teacher in charge, and classes from surrounding schools are continuously held at the Nurseries. In addition, students of our Teachers' College have classes there while they are going through training, and there are refresher courses for teachers in the field. These are held during school vacations. The nursery is owned by the Society, which pays its expenses from the affiliation fees paid by the schools linking up with it and from the sale of plants and seeds. To give you some idea of the extent of its work, I might mention that in 1930 the Society distributed to schools:

21,500 packets of Seeds.
160,000 Seedlings.
5,700 Shrubs.
1,600 Trees.

7,400	Herbaceous Plants and Bulbs.
300	Climbers.
6,100	Indoor and Pot Plants.
1,000	Carnations.
2,800	Roses.
1,200	Chrysanthemums.
1,500	Dahlias.

The Society also distributed 11,784 packets of seeds to the children of the Correspondence Branch of the Department, and, judging by the letters received, the children are displaying a lively interest in gardening activities at their homes.

The A.N.A. and other bodies have encouraged this development by giving annual prizes for the best school garden in each inspectorial district. This they have done for many years past.

One of the aims behind this movement was the expectation that the work would carry over from the school to the home, and that good school gardens would help to create good home gardens. To a large extent this expectation has been realised. Unless the work of the school garden arouses sufficient interest in the child to tend plots at home and to emulate what is done in the school garden, it is felt that one aim of this work is not realised.

At Ballarat, the Horticultural Society and the Rotary Club have co-operated in this work and between them they provide the whole expense of school displays, prizes, etc. For the last five years they have held an annual display at which thousands of entries have been received. Each year there has been a marked improvement in the standard of the exhibits. At first a dahlia (say) or a carrot was any specimen that could be so named, but thanks to periodical talks by plant specialists, who in many cases visited the schools and discussed the points that characterise a high type of carrot, bean, onion, gladiolus, dahlia, etc., etc., there has been a wonderful improvement.

The care, effort and ingenuity shown by the little gardeners have resulted in recent displays of flowers and vegetables which bear very favourable comparison with the exhibits of adult growers shown at the exhibition of the Ballarat Horticultural Society. The pleasure and satisfaction derived by boys and girls who succeed in growing such fine specimens give them an enthusiasm for, and a love of gardening which will be a lasting delight to them throughout their lives. Perhaps more than anything else gardening impresses on the young the good results that follow from systematic work, care and attention. At the same time, the knowledge and skill gained are surely of great educational value. Incidentally, too, a love of beauty is created and is linked up with the pastel drawing and art lessons. Allow me to quote the schedules of recent exhibitions in order to show the aim and extent of this work.

These included 25 competitions in flowers and vegetables; 8 in the cooking section; 10 in the needlework section—five for those under 12 years of age, and five for those over 12 years of age; 4 in the poultry section; 4 in the cattle section; 2 for sheep; 2 for pigs; 1 for potatoes; 1 for flax; and 1 for the best collection from any one exhibitor. The movement is further encouraged by the Education Department through the issue to pupils of special certificates for Home Crafts and Projects.

The school gardening movement is firmly established throughout the whole of Australia, though in many places the work is seriously handicapped by climatic conditions. It has certainly stimulated home gardening. I do not know that it has developed on quite the same lines in other countries. I remember reading that 25 years ago there were in France over 40,000 school gardens, while in Great Britain, there were at that time less than 100. I hesitate, however, to base on these figures a claim to the advantages of a system of centralised control.

I shall now turn to another aspect of this movement known as *Young Farmers' Clubs*.

As the title indicates, this movement is associated with life on the farm and includes the tending of farm animals, poultry, etc., in addition to the growing of cereals and pastures. Here again, the Ballarat Agricultural Society and the Rotary Club gave strong support. Members visited different districts and roused much interest and enthusiasm. The aim in these clubs is predominantly practical and utilitarian. Pupils are encouraged to tend their own animals, etc., from the point of view of making a profit, which remains the possession of the pupil. Full records of all expenditure of time and money are kept, and the value of everything given must be taken into consideration. To enable children to purchase pure-bred stock, the Ballarat Banking Company set apart £300. Sums borrowed were to be repaid (without interest) when a profit equal to the sum advanced had been made. Senator Guthrie, of Geelong, by providing a number of pure-bred red-poll calves and bulls for pupils of that district, has stimulated great interest. The Royal Agricultural Society of Victoria has also given great assistance for the whole State, as also has the Agricultural Department and numerous local Agricultural Societies. For instance, the Agricultural Department has, through its experts, given much assistance to boys in the choice of pedigreed bulls and has made arrangements whereby they may purchase these from the Department on very easy terms. In all these cases it is hoped that the increased profits arising from pure-bred stock by the pupils will influence parents and so raise the general standard of stock throughout the State.

Young Farmers' Clubs are in operation in many districts throughout the length and breadth of Victoria. Let me take one recent club as an illustration. I shall choose that at Sunny Creek, near Warragul, in the Gippsland district, formed in August, 1929, when the

initial meeting was held. It is in a dairying district. This club decided to purchase only registered Jersey pure-bred stock from tested herds, the idea being that if the movement was at all worth while, they should aim high. By May, 1930 (that is, in eight months) the club owned 27 pure-bred animals, representing an outlay of £365. As showing the effect of the work of the club on the locality, it may be mentioned that when the club was started there were only two herds containing pure-bred animals in the school district. There are now 14, 12 farmers having purchased pure-bred animals with the idea of gradually displacing all grade animals. All members of clubs are required to keep record books of their animals, and this generally leads to wider reading on the subject and to extension of knowledge arising out of real interest. A member traces the original home of the stock, the climatic conditions, present world distribution, best foods and the like. Drawing, mapping, geography, manual training, farm husbandry and economics, animal and plant knowledge all come into the business. On the business side the proposition is to be made a payable one, and strict records are kept. The animals have all to be entered at the local Show, and the record books presented as part of the competition.

I shall illustrate this point by quoting from the record book of Jessie Skelton, of the Scotsburn school, who had a small flock of Rhode Island Red fowls. Her record book was a masterly production with a neatly and carefully arranged index. Here are some of the items:—

How, when and where the fowls were procured.

Why were these fowls procured?

Food, care, and management.

Housing.

Results of operations.

Balance sheet.

Points in judging.

Weekly accounts.

Rules and regulations.

Diseases.

Drawings.

Correspondence.

Origin of this breed.

Records of eggs.

Snapshots.

Cuttings from journals.

The account showed items such as: —

Receipts.

	£	s.	d.
January 31st, 19 eggs at 1/- per doz. . .	0	1	7
June 28th, 1 doz. eggs at 1/6 per doz. . .	0	1	6
July 12th, 1 doz. eggs at 1/8 per doz. . .	0	1	8

and so on to a total of £18/9/4, while expenses showed:

	£	s.	d.
Cost of one pen of fowls	2	2	0
January 26th, wheat (3 weeks)	0	1	6
July 26th, 1 cock	1	0	0
5% interest on outlay of improvements	0	15	0

to a total of £5/1/6, leaving a profit balance of £13/7/10.

Jessie knew exactly why she had chosen Rhode Island Reds in preference to Orpingtons or White Leghorns. "Because," she said, "they are dual purpose birds, and if some are not good layers, they are fattened and sold for table purposes." "What do you feed them on?" she was asked. "I give them mash in the morning. This consists of two parts of pollard, one of bran and one of warm milk. At midday they get wheat, and in the evening more wheat and some green stuff." "Why green stuff at night?" she was asked. "Because I have more time then," she replied.

Another book had a Poultry Alphabet.

A stands for All White Leghorn, much in demand;

B for Burnley tests, so grand;

C is for charcoal to put in the mash;

D for the dust in which they will wash;

and so on.

Another bright little girl pointed to a well-nourished cross-bred lamb in one of the pens. "It is not up to much but it was given to me to rear. I got it from a drover. On account of the dry weather up north a lot of sheep were brought down south for feed. Some of the lambs were too weak to walk. That's how I got mine. I was charged 3d. a week for pasture. I have had it for six months, so it has cost me 6/6. I suppose it is now worth 15/-, so that if I sold it I would make a profit of 8/6. But I am going to get pure merino next time." One can go on almost indefinitely. I have time for only one more.

1930.

Feb. 10.—Nellie, my calf, is not well. Her ear is down.
I must give her oil.

Feb. 13.—Nellie is very sick. Mother thinks she will die, but dad says she will get better if she can eat crushed apples.

Feb. 25.—I have given Nellie castor oil.

Feb. 27.—Nellie is better. Her ear is up again.

Mar. 1.—Nellie is well. She is bawling for food."

So runs part of the record of a little girl, 9 years old. Nellie was a pure-bred Jersey calf. She appeared at the Warragul Show in March, 1930, still rough in the coat and uncertain on her legs, but manifestly on the way to recovery. She was one of 35 pure-bred calves owned by children of district schools and exhibited as part of the display by Stock Clubs.

But I find that I have only touched the fringe of this subject so far, and have not mentioned many movements that have grown to quite large proportions. Pasture clubs aiming at the improvement of pastures, wheat clubs in the wheat areas, our School Forestry Endowment Plantations and others have not yet been mentioned. I shall therefore give another address on school clubs and hobbies dealing with other aspects of this important development, the growth of which has been so remarkable in recent years.

I shall conclude this address by giving an account of the various clubs that exist at the Geelong High School, a mixed school of about 400 pupils. In this school there are various types of clubs—dramatic, folk-dancing, camera, choral, wireless, craft, magazine, gardening, and orchestral, each in charge of a member of the staff specially interested in the particular activity. In all, there are fourteen clubs, there being as many as three of the one type. Besides those mentioned above, Boy Scouts, Girl Guides, and forestry are encouraged by the school as a whole. Membership of a club is, of course, entirely voluntary. All stress the value of team work.

The Wireless Club has constructed a very efficient four-valve set, by which items of particular interest are broadcast through the loud speaker for the whole school.

At a fixed time on each school day throughout the whole of last year (1931) the Australian Broadcasting Company gave educational broadcasts for schools as follows:—

Monday	Lesson in Geography.
Tuesday	„ „ English.
Wednesday	„ „ French.
Thursday	„ „ Science.
Friday	„ „ Musical Appreci- tion.

This was in the nature of an experiment, and a committee has been appointed in an endeavour to evaluate the educational results.

The Camera Club is a very live one, and they have a wonderful collection of photographs largely of events connected with the life of the school. Many of the albums are most interesting, and for the owner it is an interesting record from the time he enters the school till he leaves four or six years later. They depict scenes from swimming and athletic sports, dramatic performances, school gala days, etc. By means of the Epidiascope which

this school has purchased these prints and other illustrations can be thrown on the screen for the benefit of the whole school, class, or club.

The Craft Club has many ramifications—some of the leather work being particularly good. The Magazine Club is responsible for the school magazine. The Gardening Club looks after the school garden and encourages home gardens. On Parents' Days members of clubs have an opportunity of showing their work. The other clubs function in a similar way. These clubs are all organised in the first fortnight of each school year.

V.

MORE CLUBS AND ASSOCIATIONS.

If I were asked to name the two main essentials and the two greatest needs in the objectives of modern education, I think my answer would be the encouragement of the development of individuality (which tends to be swamped in a system where large classes prevail) and the development of initiative. As these are purely individualistic, a third must be added, namely, a training in social relationships. All of these are encouraged by students' clubs and similar organisations mentioned in the previous address.

Perhaps I should begin this address in true pedagogic manner by endeavouring to formulate some of the major educational objectives of school clubs. In the first place, I would regard them as providing a valuable training in social behaviour. The child is a citizen of the society called the school, which in turn is a microcosm of a larger society. In the larger sense the pupil is thus prepared for life in a democracy through sharing the life and interests of the group. Each is trained not only in self-direction but also in the art of co-operating with others. He thus acquires a sense of his own developing powers and at the same time he submits himself to the public opinion of the group. This all fosters a sense of law and order while at the same time the special abilities of the individual are developed. All of this has valuable reactions on his attitude towards the school, which he realises more and more as a place of preparation for the fullest participation in the wider life outside the school. The clubs should foster a fine team spirit—all for each and each for all. This sense of unity with the team and the school extends soon to the whole local community, then later on to the whole nation and ultimately even beyond national boundaries to international dependence and relationships. In a word, they give prac-

tice in active co-operation. In these activities the teacher should be adviser rather than dominator, and he should try to arrange so that all may participate on a strictly voluntary basis. A number of clubs thus helps to appeal to variety of tastes and interests. The pupil should feel that the club is *his* and the school is *his*, and as such he will feel a strong loyalty to both, and he naturally will try to avoid anything that might tend to let the club or the school down.

In clubs, the pupil gets to know the teacher from an altogether different angle from that acquired solely in the class-room. Many schools have vertical divisions of their pupils into "Houses," embracing in some cases not only games but studies and other activities. Under good management the "house system" has had very fine results. Each house has its own committee of management with chairman, secretary, treasurer, and the like. These all give students a valuable insight into the manner of conducting public business, the rules of debate, and the like. A system of school prefects is essential in any large school, and many of the fine results secured in English schools are largely due to this system. It flourishes in practically all the secondary schools in Victoria, and in the other States of the Commonwealth and in New Zealand as well. It has proved so successful that it is likely to continue, though the system of the Students' Council, either as alternative or substitute, is finding favour. So far, the Students' Council—under whatever title may be adopted—has in Australia been developed chiefly in connection with Teachers' Colleges and Universities. In America, it is common in many other types of schools.

The plan aims at giving the students some participation in control and some form of representative government. The idea is to share the problems of the school with the pupils through their elected representatives, and as such it manifestly provides a training in democratic government. There is really no such thing as "pupil self-government," though I was informed by a

Director of Education from Saxony (Germany), who visited us last year, that in schools there the principals are elected by the teachers, and the teachers by the pupils. If this is true (and I have no reason to doubt it) it seems to me to be pushing a theory rather far. This led to a certain looseness in discipline, and many parents removed their children and sent them to schools where they had to pay fees. The Hamburg experiment also led to the abandonment of a system on ultra-democratic lines. The "path to freedom" in the school requires precedent preparation and training if it is to be successful. Student Councils should not be forced on a school. They should govern within the ambit of the powers assigned to them with the consent of the governed. They deal mainly with what I have termed extra-curricular activities, and often also with conduct and practices that may affect the reputation of the school as a whole. There are various types of organisation of these councils which I shall not, however, discuss. Usually, the Students' Council has at least one representative on each of the other school committees and sometimes the Council itself consists of representatives elected by these various school committees or clubs. Each committee, club, or association formed should have its rules and constitution adopted by members soon after its formation, and these they should follow strictly, amending them in the formal way prescribed, as may be found desirable from time to time. To "begin small and grow large" is a good motto, and committees will be well advised to try their hands first with easy tasks. In all cases the power of veto must be retained by the head master, who, after all, is responsible for everything that goes on in the school. His must always be the final authority but he should rarely find it necessary to exercise his powers. On his part, he will act as a rule through his Council advisers.

The institution of games is older than schools, but at no period of history have they flourished as in the

schools of to-day. While the origin of most existing games is obscure and nearly all are admittedly of great antiquity, I doubt whether all students will agree with Culin (quoted in Monroe's *Cyclopaedia of Education*), who says, "It is safe to say that no new game has been invented during the historic period, and all that we regard as new are only modifications of games played before the building of the Egyptian pyramids." He further states "Pictures of ancient Egyptian games on the tombs of Beni Hassan (3000-2500 B.C.) show a prototype of a game known in England as "Hot Cockles," in America as "Biff," in France as "Main-Chaude," and the Greek "Kollabismis," which may also be the one referred to in Luke 22 : 64, "And they blindfolded him, saying, Prophecy: who is he that struck thee?" It appears that among the American Indians were found the prototypes of dice, cards, chess, golf, shinney (hockey), basketball, and rackets. Interesting as the history of games is, I must leave it, after a quotation from Dr. Cole's valuable book, recently published, *A History of Educational Thought*. His quotation is taken from Fitz Stephen's *Life of Becket*, describing London schools as they existed in 1118. On feast-days disputations were held in the churches in the presence of the public. Set speeches, debates, rhymes, etc., were indulged in. Regarding games, he says, "Every year on the day which is called the Carnival (Shrove Tuesday), to begin with the boys' games (for we were all boys once), all the boys in each school bring their masters their game-cocks, and the whole morning is devoted to the boys' play, they having a holiday to look on at the cock-fights in their schools. In the afternoon the whole youth of the city goes into the suburban level for a solemn game of ball. Each school has its own ball, and nearly all the holders of civic offices also provide one. The grown-up people, the fathers and rich men of the city, come on horseback to look on at the struggles of the young, and in their ways grow young with the

young; and the motion of natural heat seems to be excited in them by looking on at so much motion and by sharing in the delight of the freedom of youth."

I shall not attempt to enumerate the uses and value of games. For health and recreation and for physical, mental, moral and social education their value is obvious. That games call for great activity, skill, courage, fortitude, perseverance, fairness, generosity, loyalty, co-operation, and self-sacrifice is equally obvious. They develop in the player "a capacity for instantaneous and perfectly co-ordinated reaction to situations" which is valuable in situations off the field, *e.g.*, in emergencies, in crises, in times of stress, excitement or peril. Above all, most of them develop the team spirit and the capacity to work in co-operation with others. Think of our metaphors, "Playing the game," "That's not cricket," and the like, or of our poets, Kipling, Newbolt, Cuthbertson, and others who in many instances make the fine things in games the standard for what is best in behaviour. To "fill the unforgiving minute with sixty seconds' worth of distance run," is what makes a man.

The movement in favour of establishing children's play-grounds under trained play-leaders is developing rapidly in all cities throughout the world. It has been found that where these have been established, juvenile delinquency has been reduced 50% (in Chicago).

Games in as great a variety as possible should certainly be fostered in every good school. They do much more than merely fill in spare time, and thus keep boys out of mischief, or give an outlet for superfluous energy. Even at the lowest, by cultivating the ideal of physical fitness, and thus encouraging the avoidance of smoking, drinking, and other forms of self-indulgence, they certainly have a value which may be recognised by each individual pupil, but they have much higher values than merely preventing Satan from having his opportunity. In games, pupils learn the mastery of their own bodies and the necessity of self-repression in the interests of others.

Active participation in games assists in the sublimation of sex instincts. Dr. Cyril Norwood, Headmaster of Harrow School, in *The English Traditions of Education*, writes very wisely on the influence of athletics. He expresses his ideal in these words "That a game is to be played for the game's sake, and that it matters not a button whether it is won or lost, so long as both sides play their best; that no unfair advantage of any sort can ever be taken, and that within these rules no mercy is to be expected, or accepted, or shown by either side; that the lesson to be learned by each individual is the subordination of self in order that he may render his best service as the member of a team in which he relies upon all the rest, and all the rest rely upon him; that, finally, never on any account must he show the white feather." (Page 109.) Played in this spirit, games are indeed a magnificent preparation for life by actual participation in it.

I should not omit America, where games also play an important part in schools and where physical education is more soundly organised than anywhere else with the possible exception of Germany. Considerations of time prevent description. In its widest connotation the spirit is well expressed in the lines—

"And when the last Great Scorer comes
To write against your name,
He'll ask not if you won or lost
But how you played the game."

How beautifully, too, one of New Zealand's poets, Seaforth MacKenzie, now a law officer in the Commonwealth Service, expressed in *L'Envoi* the spirit in which defeat should be taken—

"So over, all over: the whistle peals 'Time!'
The field lies bare to the last of the light.
Too late to tell what you might have done;
The goal is kicked, and a stronger has won;
To you is only the glow of the fight;
To you is only the soreness and grime."

What matter, so long as you played the game?

What matter, provided you filled your place,
And took the fall, the kick, the blow,
And tackled the foeman clean and low—

Blind sun in your eyes, wet wind in your face—
What matter so met ye the luck as it came."

Before leaving this interesting field, I feel I should mention one danger which it seems to me is evident in Australia. Games may easily become over-competitive. For the best results, each school should provide for its own games. In inter-school contests too often the school team is everything, and the rest of the school hardly worth considering. The present over-emphasis on inter-school contests needs careful watching.

In Victoria, games and athletic sports in Primary State Schools are well organised under a central body of teachers known as The Victorian State Schools Amateur Athletic Association, formed many years ago. The backbone of this system is the school district, of which there are 20 in Melbourne and 19 in the country. Each district consists of about six schools and has its own committee of teachers. Competitions are held in each school, then between schools by teams of children. The premier school of each district is thus selected. Premier schools of each district then compete until by a process of elimination the champion school is obtained. The secondary and technical schools have district organisations on somewhat similar lines. Swimming is also organised in districts with local competitions, concluding with a final great day. Apart from sea-baths, the municipalities of the metropolitan area provide nine up-to-date municipal baths, which are available free for classes of school children in charge of teachers. The two at Brunswick cost £33,000, and the others about £10,000 each. Brunswick and Melbourne have each a covered pool, which is heated and used during the winter. Inland, many swimming pools have been provided in various parts of the State, and most of these are also well

equipped with diving boards, dressing sheds, etc. A great deal of money has also been spent in making safe swimming pools in rivers, creeks and water channels. In the last year for which results were available (1929) statistics show that 14,000 children learned to swim, 7,000 gained junior certificates, 2,000 gained senior certificates, 600 gained medallions, while 237 teachers were trained to teach swimming and life-saving. This year (1931) all our teachers in training colleges—over 400—have been trained. Summer schools in swimming, usually at some seaside resort, have been held for many years past, and the newspapers have conducted "Learn to Swim" campaigns which hundreds of our teachers have helped to make a success. It should be remembered that instruction in games, as apart from athletic sports, is compulsory in all schools under the Department, an hour each week being set apart for this purpose. This is apart altogether from the extra time, usually outside ordinary school hours, given to athletic sports and competitions. I believe much the same is the practice in the other States of Australia, and possibly the Dominion of New Zealand has gone even further in this direction.

Boy Scouts and Girl Guides.

Another movement of great educational significance is that known as Boy Scouts and Girl Guides. Both these movements are strongly encouraged by the education authorities, and both show distinct signs, if not of tropical growth, at least of steady development. The recent visit of the World Chief Scout and the World Chief Guide (Lord and Lady Baden-Powell) gave a fillip to both movements, which are really the one movement for boys and girls respectively.

The figures of those attending the rallies during their tour of inspection do not show the full extent of the movement, but they are sufficiently arresting to excite attention.

These show attendances of Scouts and Guides—

New Zealand (4 rallies)	over 14,000
New South Wales (2 rallies)	nearly 20,000
Queensland (1 rally)	over 3,000
South Australia (1 rally)	about 8,000
Tasmania (2 rallies)	about 2,700
Victoria (1 rally)	about 17,000

In Victoria there were over 18,000 Scouts and over 9,000 Guides in 1930.

Both movements make a great appeal to the young, and this appeal is entirely wholesome and worthy of all encouragement. The spirit to help each other, to sink individual interests in the interests of the whole, to keep smiling and whistle in the face of difficulties, which characterises the movement, has gained for it the support of schools, churches, Rotary, Toc H, Legacy Clubs, and the like.

It is indeed the spirit in which our present difficulties should be faced and will help all greatly in tiding over them. I shall not attempt to describe these organisations with the special provision made for younger members and lone members. In addition to the Scouts there are Wolf Cubs, Rovers, Sea Scouts, Lone Scouts, and even Physically Defective Scouts, with similar provision on the girls' side, with the Brownies for those who may join at the age of eight years.

In Victoria, these movements are brought under the notice of students in our Teachers' Colleges. It is found that among the students admitted each year there are always some who have taken an active part before entering the Colleges. These are encouraged to continue and others to join. As the Primary students go direct from the Teachers' Colleges to small rural schools, special attention has recently been given to Lone Scout work. One of our teachers, Mr. C. A. Hoadley, of the Footscray Technical School, has been for some years Chief Scout Commissioner for Victoria, and he went in charge of the Australian contingent of Scouts who attended

the coming of age celebrations at Gilwell Park, England, in 1929. Some enthusiasts have urged that these two movements should be made an integral part of the school curriculum for all pupils. To do this would, in my opinion, destroy the voluntary nature of the scheme and seems to be contrary to its whole spirit. Meanwhile, they are developing soundly and are doing an amount of good that is difficult to measure.

School Orchestras, Music and Singing.

The teaching of singing and efforts to develop musical appreciation is part of the ordinary work of every school. The work of the teacher during recent years has been supplemented and assisted by the use of gramophone records and broadcasting, but in this, as in so many other branches of educational work, it is the personal influence of the teacher that is of paramount importance. There are at least five aspects of music that concern the schools—listening to music, interpreting (often by expression in movement), singing, playing an instrument, and composing. To cultivate the art of listening to music, not with the ear or the intellect alone, but with feeling that amounts to absorption in the music is an art the acquisition of which varies greatly with individuals. The expression or interpreting of music is the response of the individual to the sensations aroused. This may merely be the rhythmic beating of time, or dancing, or marching, or the later development of eurhythmics where you have a trained physical reaction to the perception of musical rhythms. The work of M. Dalcrose and his students is known in Australia and has taken root here and there and is slowly establishing itself. For success it requires teachers fully trained in the system. Folk dancing, marching to music and the like are much commoner. Of the other aspects mentioned, singing, playing an instrument and composing, the last mentioned need not concern us to-day. Nor is it my purpose to discuss class singing and the playing of

instruments about which so much could be said. I am concerned to-day rather with school clubs and extra class-room activities. These are the days of musical competitions and these have reacted on the schools. Choirs and bands have been formed in schools and the pleasure arising from these has not been limited merely to the competitions mentioned. In Victoria, much good has been done through the Bequest of the late William Gillies, a well-known writer on nature topics and history for schools, who died in 1925 leaving his estate—about £10,000—to be devoted to three purposes:—

1. The encouragement of instrumental music in schools, leading, it was hoped, to the increase of village bands and family orchestras.
2. The encouragement of the art of reading aloud—with special emphasis on reading aloud in the family circle.
3. The encouragement of nature study, again with the object of making home life, especially in the country, more attractive.

The objects of the testator are being admirably realised. From the interest arising—for the fund is a perpetual one—£3630 has already been made available for the purchase of band instruments, and, thanks largely to the encouragement given by this fine bequest, there are now at State Schools in Victoria, each under expert tuition, 31 brass bands, 9 orchestras, 13 fife bands and 23 violin classes. That the effect of such work has a significant bearing on the right use of leisure is undeniable. Tennyson says: "We needs must love the highest when we see it," and I think you will find that children will respond to the best music in a way that will surprise you. Just try, for example, without any previous discussion, a record of, say, Dvorak's "Humoreske" and a jazz tune. You will probably find that a show of hands is overwhelmingly in favour of the former.

School Savings Banks.

Brief mention might be made at this stage of a totally different movement, which has shown a remarkable development. I refer to the School Savings Bank, which in Victoria is conducted as a department of the State Savings Bank. It is not peculiar to Victoria, as similar systems are in operation in the other States of the Commonwealth. The unfortunate closing and reconstruction of the State Savings Bank (including the Schools Department) in New South Wales last year has not, I believe, adversely affected the movement in the other States.

The prosperity of a nation must depend largely on the thrift, prudence and industry of its people, and instruction in the first principles of thrift, lessons on economy and self-denial, the value of wise and the futility of foolish spending should be impressed on the minds of the rising generation.

The last Annual Statement (June, 1931) showed that on 30/6/31 there were in Victoria school banks in 2,502 schools, with 167,636 depositors, and the total credit balance was £288,195. Framed certificates are issued by the Bank to each school where 100% of the scholars are depositors (237) and where 75% of the scholars in average attendance are depositors (917). These certificates have been issued to over 1100 schools.

These figures indicate sufficiently that the system is firmly rooted, and is growing vigorously.

Relief Work.

The Great War gave the schools the opportunity and the obligation of organising relief work on a grand scale. It promoted ideals of community service among the youth attending the schools in those days, and these ideals have been maintained ever since. Victoria is very proud of the work done by our State schools in various forms of service in those dreadful days, under the inspiring lead of our teachers and inspectors. The relief of

distress at home and abroad, the provision of comforts for the men at the front, the caring for the sick and the maimed in hospitals, and assistance to dependants left behind, absorbed their energies for years. When at the end of the war a statement of what had been done was prepared it was found that—

Over 400,000 articles of comfort had been sent abroad.

£438,044 had been contributed to the War Relief Fund.

Over 460 tons of supplies for hospitals at home had been provided free.

The Young Workers' Patriotic Guild and the League of Young Gardeners earned and gave about £50,000.

As one writer of the time expressed it—

"Let us have it to our credit in the better days to come,
When the dove of peace is brooding once again,
When the clash of arms is silent and the leaden chorus dumb,
That Australian children helped Australia's men."

That wonderful story now belongs to the past, but this work did not cease with the war. We are still administering what is left of the Relief Fund, and our expenditure is based on calculations that will exhaust it in about 10 or 11 years. But assistance to hospitals, especially those for children, and to those seriously handicapped, such as the crippled, blind, deaf, etc., has been continued.

One of the forms this service has taken is that of the Junior Red Cross, of which there are over 1,000 Circles in Victorian schools, with an active membership of over 43,000. In a sense, the Junior Red Cross movement is complementary to that of the Schools Savings Bank, for while the latter encourages thrift and care of self, the former gives opportunities for self-sacrifice in the interest of others.

These Junior Red Cross Circles have formed "links,"

as they are called, with 305 Circles in other countries, e.g., Canada 91, United States of America 55, Japan 10, European countries 55. Many of these interchange portfolios of views and written descriptions of the places, people and their occupations, and the history of the development of the place, which are valuable and interesting. As indicating some measure of the work of the Junior Red Cross Circles in Victoria, I might give the following list of articles, etc., supplied by them to hospitals in 1930:—

Eggs	117,921
Garments	3,659
Books	565
Jam jars	2,402
Groceries lb.	3,193
Pillowcases	69
Cash	£2,278
Washers	349
Vegetables lb.	3,091

This is one of the happiest movements ever inaugurated among school children, and is now almost world-wide in its operation. To work for those whom they may never see, to help those in suffering and to feel joy in the effort, is surely something that will enrich the whole life of the child.

The magazine *I Serve* is full of touching instances of sacrifice and thought for others on the part of little toilers, both in the far bush and in the cities. The resulting benefit in the formation of character in the nation is incalculable.

At this point, the opportunity might be taken to describe very briefly what our schools—teachers, children and mothers' clubs—are doing to relieve cases of distress in schools arising from the present depression with its attendant unemployment. In 1929, on the approach of the winter, a number of head teachers decided to face the problem. Circulars were sent to every school in

Melbourne, and as a result of the information gained the schools were divided into three classes:—

Class A were those who needed no outside help, and were in a position to give help to others.

Class B were those who could, so to speak, "consume their own smoke." They could provide for all cases needing help in their own schools, but had nothing over to help other schools.

Class C were those requiring outside help.

The system was worked without any publicity whatever, and is undoubtedly one of the finest examples of unostentatious public service of which I have heard. Many children bring two lunches to school daily, one of which is handed to the head teacher, who uses it either in his own school or in another. Representatives of mothers' clubs attend various schools daily in turn, and prepare soup, chocolate, and other food, for children who are hungry. Clothing and boots are provided for those in need. Unemployed mothers make up garments and unemployed fathers repair boots. Trucks of firewood, cases of fruit, and the like, are sent in from country schools and distributed. Last year the system was extended to the whole State, and as the economic position became worse it was found that the number of Class A schools was decreasing, while the Class C schools showed a considerable increase. Still, all demands were met, and it can be fairly claimed that throughout the State there is not a hungry or under-clothed child in attendance. This movement is, of course, altogether apart from adult relief, which the schools do not attempt to handle.

I am pleased to say that at the end of last year, 1931, the organisation was functioning successfully, and had a credit balance of a few hundred pounds in hand when the schools closed for the long vacation.

There is a great wealth of material in connection with extra class-room activities which I cannot use here.

The value of school excursions had entered my mind. Secret societies among students of secondary schools is an intriguing subject, but happily it has not developed in these southern lands to the extent experienced elsewhere, and especially in America in some of the sororities and fraternities at colleges.

We have in Victoria, however, developed under the name School Forestry Endowment Plantations, a movement which may be of interest to you. This is the more likely to be the case, as New Zealand, in the essentials of both soil and climate, seems to be specially suitable for forests.

To the early pioneer the forest-covered land was required for agriculture, and the tree was regarded as an enemy to be got rid of. Now we know that in the blind destruction of forests we have wasted one of our best assets. A world-shortage of timber is threatened. In order to create a "forest conscience" and to develop a love of trees, the former Director of Education in Victoria, Mr. Frank Tate, with fine vision, commenced a movement in the schools known as the School Forestry Endowment scheme. This was in 1923. A covenant was drawn up as follows:—

COVENANT

IN THE MATTER OF THE
SCHOOL ENDOWMENT PLANTATION
OF THE

SCHOOL COMMUNITY.

WHEREAS it is desirable to promote among the pupils of the School ideals of disinterested citizenship by encouraging them to labour diligently in a task which will confer material benefit upon their school in after years but from which they themselves will derive no direct advantage—
AND WHEREAS it is of grave importance to create enlightened citizenship in respect of the forestry resources of this State to take practical steps to utilise and beautify our waste lands and to provide for the future well-being of our country by husbanding and increasing her timber supplies and rendering her less dependent on other countries—
AND WHEREAS an area of _____ acres or thereabouts consisting of

and shown in red color on the plan herewith has been granted

for the establishment of a school endowment plantation to be known as

and has been registered as such in the Education Department and has with the approval of the Minister of Public Instruction been placed in the trusteeship of—

.....
.....
.....
.....

AND WHEREAS it has been decided that such area shall be planted with suitable trees and maintained until such time as the Trustees with the approval of the Forests Commission deem most profitable for the cutting and disposal of the produce the revenue derived from the sale of such produce being invested by the Trustees in an account to be called the Trust Fund and to be used for such purposes of the School as the Trustees may with the approval

of the Minister of Public Instruction, decide.

NOW KNOW ALL MEN BY THESE PRESENTS that we the parties hereto in the desire to effectuate the hereinbefore recited purposes do hereby mutually covenant and declare that we shall for so long as we shall be actively associated with the aforesaid school :—

- (1) Fence the aforementioned area securely with a serviceable stock-proof fence and wherever necessary with a wire-netting fence
- (2) Maintain all such fencing in serviceable condition ;
- (3) Prepare each year at least acres of the above plantation for the planting of trees and make ready such area for planting at such period of the year as is most suitable in this locality ;
- (4) Plant annually with conifers or other suitable trees the above acres or more at such season of the year as may be most suited to the species planted ;
- (5) Give transplants such care as may be advisable to secure their establishment and growth and protect them from fire by suitable means ;
- (6) Provide plants for each annual planting by the preparation and care of a seed-bed and transplant-bed sufficiently large to provide the plants necessary to plant such area and such additional replants as may be necessary from the previous season's plantings or from the cutting and disposal of mature trees ;
- (7) Keep the whole area free from noxious weeds and vermin ; and,
- (8) On our respectively ceasing our connexion with this school make such arrangements as will ensure the continuity of the work.

IN WITNESS WHEREOF we the parties hereto have set our hands and seal this day of in the year of our Lord one thousand nine hundred and

SIGNED SEALED and delivered
by the said parties hereto—
that is to say—

..... L.S.
.....
.....
.....

in the presence of
..... witness.

At the end of 1931 planting season there were 306 established school endowment plantations, and 80 additional schools had applied for land. The total area of land controlled is approximately 4,000 acres. The bulk of the area consists of Crown lands granted for the purpose by the Lands Department and of forest land granted by the Forests Commission. About 150 acres have been donated by public-spirited citizens, and about 100 acres have been purchased by schools because no suitable Crown lands were available.

The Forests Commission provides seedling trees where necessary, but schools are encouraged to raise their own trees in the school nursery. In this way, about 200,000 trees are raised locally each year for school plantations and for distribution among pupils for home planting.

The Forests Commission assists with materials (not labour) for fencing to a maximum of £500 yearly for all schools. Local contributions towards fencing throughout the State are approximately £1000 yearly.

The scheme was inaugurated in February, 1923, and has been enthusiastically taken up by teachers, public bodies, and parents. The aim is to secure an area up to 50 acres, to plant from one to five acres annually, to cut the sections of trees as they mature, and to replant. It is evident that, by the systematic annual plantings, the importance of tree planting will be emphasized.

The areas are controlled by local trustees, who are nominated by the School Committee. The official representatives of the Department are the District Inspector and the Head Teacher, who are trustees in virtue of their office.

Plantations have been established by all types of school—rural and city elementary schools, rural and city high schools, and rural and city technical schools.

Partnership plantations have been established to meet the need of city schools which are unable to secure an area sufficiently close to their own schools for individual working. A small country school secures the area, usu-

ally a large one, and a city school joins as partner. The city school provides funds to fence the area, in many cases grows the seedling trees, and assists the country school with the planting. Transport in these cases is by motor bus or train. The country school, being on the spot, has the general oversight of the plantation. Future profits will be divided.

The objects of the School Forestry scheme are as follow:

- (a) Development in the rising generation of the right attitude towards Forestry.
- (b) To emphasise the national importance of Forestry and the need for afforestation to supply timber requirements.
- (c) Development of citizenship ideals in pupils by unselfish public service for a future generation.
- (d) Beautification of waste areas.
- (e) Commercial asset for the school. It is estimated by experts that the trees will be worth £150 to £250 per acre.

(Note that trees are planted eight feet apart—680 to the acre.)

Some Results to Date.

- (a) The Forestry Commissioners have publicly stated that in the general work of afforestation in Victoria a new attitude is noticed and a new interest is being developed. These are attributed to the influence of the School Forestry scheme.
- (b) Influenced by the School Forestry scheme, many parents have planted a portion of their land with trees for commercial purposes.
- (c) Some Shire Councils have planted areas to augment the future revenues of the Shire.
- (d) Fruitgrowers and farmers throughout the State have been influenced to plant shade and shelter belts on their properties to provide shade and shelter for trees, crops and stock.

The different clubs are almost too numerous to mention. There is the Gould League of Bird Lovers, which has a membership of 98,000 in Victoria and celebrates its twenty-first birthday this year (1932). It is designed to foster the love and study of birds, and on the last Friday in October (known as Bird Day) special lessons on birds by teachers and talks by ornithologists are given in the schools. The *October School Paper* is devoted largely to birds, and articles in *The Education Gazette* supplement these for teachers. Annual prizes and medals are given for essays, notes on observations, stories, poems, etc.

In my last address I mentioned Pasture Clubs, of which 155 have been formed in 22 inspectorial districts. As the name implies, these clubs aim at improving pastures, and they receive strong support. Units of one square perch are formed, and the Committee not only advises as to the technique of sowing, manuring, etc., but arranges visits to properties where pastures have been successfully established, and supervises the keeping of records of work done, seed and manure used, rainfall, etc., and in addition encourages the children to establish unit plots on their home farms.

The work is under the direction of the Supervisor of School Gardening, to whom half-yearly reports are sent. Seeds are supplied free by one of our daily papers and manure by a fertiliser company, so that the cost to the State is nil, while the benefits accruing are great.

Perhaps the work of the National Safety Council of Australia through its Junior Safety Councils should also be mentioned.

These Councils exist at present in nearly 60 schools, and the number is increasing. They work on the lines of similar Councils in America. The pupils form Councils, appoint officers, and devise new and necessary machinery. Their duties are to prevent accidents in the playground or in the street, especially at the time of assembly and dismissal. They learn much regarding

courtesy and set a fine example to the older people, to young children, and, in fact, to all.

It was remarkable that at the great display given in the Melbourne Cricket Ground, in the presence of the Duke and Duchess of York, no teachers appeared on the ground. The demonstration afforded a striking illustration of what the children can do when entrusted with a measure of responsibility.

I have not alluded to pupils' dramatic performances, a movement which in late years has experienced a considerable development—or to many other forms which these clubs and associations take. I hope I have said enough to indicate their significance and importance in the training of the citizens of the future. If, indeed, mankind is heading towards a co-operative world state, these agencies will assist materially in that direction. They all will help to avoid the narrow nationalism and jingoism that unhappily characterised some schools and nations in the past. More than perhaps anything else, these clubs and associations should help to harmonise the discords of our social life. To-day too many antipathies and antitheses remain. Perhaps due largely to machine production, we have art severed from industry, and joy has been divorced from work. We also have experienced the separation of political economy from humanity, and science from religion. These community efforts help to bring all together in a fine competitive spirit for mutual improvement.

VI.

MECHANICAL AIDS IN EDUCATION.

i—MOVING AND SOUND PICTURES.

While there is a real danger that in any age educational practice may become stereotyped and conventionalised, it is to be hoped that it will not experience the fate that has overtaken much of industry, and become mechanised. These dangers are real enough, but I cannot imagine that a shadow and/or a mere voice can ever replace the personality of the teacher. The influence of one human soul on another—"not calculable by algebra nor deducible by logic"—will always remain. The good teacher will, however, adapt his methods and utilise modern inventions in his work. In modern education especially, one great aim must always be to discover and develop the individuality of the child, and this is opposed to all theories of mass production, where the aim is to secure a product of one type and pattern. At the same time, the value of mechanical aids should be fully realised, and during the last fifty years we have moved very far from the picture of the older schools, where the abacus, the blackboard, the book and the birch were practically the only aids allowed to the teacher. With the widening of the curriculum and the new objectives of education, the schoolroom has changed from a prison to a (palace, I had almost said), but perhaps "parlour" will more nearly convey my meaning, though I do not wish to exclude the "workshop" idea, of course. The hanging of pictures in the schoolroom may have been begun partly from a desire to decorate the prison, but more in order to use them as composition exercises. At first they were crude, but nowadays the best reproductions of world masterpieces in art are

regarded as being only good enough for the schoolroom. Then to help in the teaching of singing and marching, especially with the younger classes, the piano was introduced. The introduction of nature knowledge and science increased the use of apparatus and equipment. Other subjects added their quotas. To-day we have advocates of the epidiascope and the lantern with the still or the moving picture, the gramophone and the sound picture, broadcasting, and even television knocking at the doors of the schoolroom, and some of these have already found admittance.

The Gramophone.

Though the reproduction is not yet perfect, the gramophone has certainly brought the possibility of hearing the world's best in music, singing and speech within the hearing of every child, just as reproductions have done with pictorial art. With the good is associated the bad, and while the world's worst may not be admitted, too much of the second or third-rate may unfortunately often be found. The gramophone has been largely used in teaching musical appreciation, and apparently with a good measure of success. It has been adapted to teaching many things—languages, music, singing, speech and the like—and, wisely used, it has a distinct value, though the value may easily be over-rated.

The Epidiascope.

The epidiascope is displacing the older form of projection lantern, and has the great advantage that the preparation of slides is obviated. Pictures, graphs, tables, printed matter, and even objects and experiments, by its means are projected and magnified on the screen from the book or written paper without using slides. The educational value of such aids as I have mentioned is generally recognised by teachers. I shall therefore leave these with this brief mention, and proceed to the consideration of the moving picture and broadcasting as educational aids.

The Moving Picture.

Someone said recently: "Our teachers are living in the age of Henry Ford, and are trying to prepare their pupils for the times of the village blacksmith." Like the village blacksmith, teachers must change their tools in order to keep pace with the needs of a changing age, though, unlike him, the teacher remains known as a pedagogue, while the blacksmith has blossomed forth as a motor engineer. However conservative teachers may be in their attitude towards their work, the fact remains that the younger generation responds readily to new inventions to such a degree as to leave the older generation gasping. Youth is living, indeed, in "the age of Henry Ford," and the teacher must not remain behind in that of the village blacksmith.

The development of the moving picture is a comparatively recent phenomenon. As it has improved in technique, its possibilities have been exploited commercially to the fullest extent. "From Greenland's icy mountains to India's coral strand" the world has been searched for suitable scenes and objects to be "shot." Not only current happenings, but the events of history, the drama, the novel have all lent their aid and been recorded on the film. The art of photography seems almost to have reached its highest possible development in such pictures as *Ben Hur* and *Trader Horn*. The popularity of the moving picture is shown in the erection of special theatres in almost every town throughout the world and the closing or transformation of the older type of theatre. Extreme claims were made as to the educational value of the moving picture in schools, and some even asserted that it would enable children to attain certain standards of education years earlier than was possible by the older methods of instruction. Much of this extravagance was undoubtedly commercial propaganda to assist the selling or hiring of films and projectors. There is, of course, some basis for the claims made. Every teacher will freely admit

that things seen (even if they are only shadows of reality, as moving pictures are) make a more lasting impression on the mind than things only heard or read about. The advocates of the moving picture pushed their claims very hard, but the attitude of teachers on the whole was praiseworthy. They were willing "to give the game a fly" and to experiment with this new device. When I was abroad in 1922 I found that believers in visual education were, in Great Britain, generally opposed to the introduction of the moving film in schools, while in the United States the number of States favouring the "still" picture were in the majority as compared with those favouring the moving picture in schools. Thus in Albany, where the Visual Education Bureau for the State of New York is established, no support whatever was then given to the moving picture, but there was a wonderful collection of hundreds of thousands of slides covering almost every country in the world. These were all classified in sets, and lent to the teachers for use in the schools of that State free on application. But the claims to the value of the moving picture could not be denied, and since that time they have been subjected to many more or less elaborate researches in different countries in order to test these claims. The technique of these researches has been improved, and a variety of checks to confirm or modify conclusions have been introduced. The results of the research made by F. N. Freeman and others (the majority of whom were teachers) were published under the title *Visual Education* in 1924. This is still a standard text-book on the subject. This research showed that either as an introduction or as a supplement to other instruction the moving picture had a value in the classroom, varying with different subjects, but that demonstration and oral instruction emphasised and interpreted by the teacher gave more satisfactory results. In October of the same year (1924) the *British Journal of Psychology* gave an account of an experiment conducted by

G. Revesey and J. F. Hazelwinkel, of the Psychological Laboratory, Amsterdam, on "The Didactic Value of Lantern Slides and Films." The writers claimed that "the energetic propaganda made for the film on the strength of its alleged didactic importance is not well founded." They claimed that for pupils up to the age of 17 years the slide gave better results than the film—even than the stop-film.

In 1928 was published an account of the Eastman experiment based on the testing of 11,000 American children in twelve cities, carried out by teachers under disinterested management. This is probably the most elaborate investigation that has been made. It showed that instruction by teachers with the assistance of films improved to the extent of 33% in geography, and to the extent of 15% in general science. A later experiment conducted by a graduate student of the Columbia University with 500 Seventh Grade pupils in New York tended further to establish the educational value of films. In this case the pupils were divided into three groups:—

Group A were instructed by oral means only.

Group B were given 12 minutes of motion pictures, followed by oral instruction.

Group C had oral instruction, followed by motion pictures.

The check used in this case was to change the pupils round, so that they were in different groups at different times. Examination to test how much of the subject-matter was retained by the children showed that Group B was 22% higher than Group A, and Group C was 15% higher than Group A.

A Victorian Experiment.

In April, 1930, I had a Committee appointed in Victoria to consider the whole question of Visual Education, and to report upon the advisability of using films

and slides in schools. The Committee consisted of 17 members, with Mr. G. S. Browne, Vice-Principal of the Melbourne Teachers' College, as Chairman, and in addition to Mr. Browne it included two senior inspectors of schools, eight teachers, representing State Primary, Secondary and Technical Schools and registered schools, and other experts. The Report was presented in March, 1931. The following account is taken from this Report.

The services of a skilled teacher were made available for the work of the Committee, which selected six films of distinct educational significance, covering a variety of topics. These were—

Subject.	Topic.
Economic Geography	Rubber—Its Growth, Treatment and Uses.
Physiology	How We Speak and How We Hear.
Physiographic Geography	Oil—Its Origin, Treatment and Distribution.
Nature Study	The Mosquito.
General Science	How a Motor Car Engine Works. (The Power Within.)
Composition	The Native Animals of Australia.

Eleven classes were chosen for the experiment from the Training Schools associated with the Melbourne Teachers' College. Each class contained about 40 pupils, ages ranging from $12\frac{1}{2}$ to $14\frac{1}{2}$, with the sexes fairly evenly divided. Three of the classes were F forms (Grade VII) in a Central School, while the remainder were eighth grades in Elementary Schools. Thus the 450 children who took part in the experiment were by no means a picked group, as they would have been had they been selected from junior forms in the High Schools. They represented an average type of post-primary boy and girl, and the Committee felt that the results of an experiment carried out with these children would be applicable to school children of the same age all over Victoria.

A scheme for rotating topics and methods was adopted, which made it unnecessary to have classes of exactly the same intellectual ability, but a group test of intelligence was given to each class to assist in interpreting the results.

The classes were known by letter names distributed as follow:—

- J North Brunswick (Elementary School).
 - K South-west Brunswick (Elementary School).
 - L Faraday Street, Carlton (Elementary School).
 - M St. Kilda Park I (Central School).
 - N St. Kilda Park II (Central School).
 - O St. Kilda Park III (Central School).
 - P Errol Street, North Melbourne (Elementary School).
 - Q Coburg East (Elementary School).
 - R North-west Brunswick (Elementary School).
-
- X Flemington (Elementary School).
 - Y Princes Hill (Elementary School).

Each school except X and Y had six lessons, some with film and some without, on the six subjects set out above. X and Y did not enter the experiment until a later stage; they were kept aside as two special groups for the last and critical section of the experiment. No class or teacher knew the letter name of any other class, and the element of competition was minimised as much as possible; but the children became so interested that they took copious notes during the lessons, discussed them amongst themselves, amplified them from encyclopædias, and learnt the subject-matter very carefully at home. This was partly due to the fact that the tests used were of the "New Examination" type, which interested the children very much and won their unqualified approval, in contrast to the "Essay" type of examination, with which they were already so familiar.

Three methods of presenting the subject-matter were used, namely:—

Method A.

Ordinary oral instruction by the class teacher. Pictures, diagrams and classroom aids were used, but no moving picture was shown.

Method B.

Lessons given by means of a moving-picture shown by the special operator. The film was preceded by a short introduction, and a running commentary was given by the operator as the film proceeded. At certain points the film was stopped while discussion took place between the operator and class. Frequently the film was stopped at the request of the class, while rough sketches were made from the still picture.

This method practically amounted to turning the film into a "Talkie."

Method C.

The film was shown without explanation or discussion. There was no introduction except a mere announcement of the subject. The class took notes, but there were no questions asked or answered. Thus this was a purely visual method of instruction, the lesson being given entirely by the silent film.

Groups J, K, L, M, N, and O were each given

Two subjects by Method A.

Two subjects by Method B.

Two subjects by Method C.

The subjects were rotated to fall in different order, and with different methods, in the various schools.

Group P, a control group, had all six subjects by Method A (oral lesson), and did not see any of the films.

Group Q had all six subjects by Method B (film plus running commentary).

Group R had all six subjects by Method C (film alone).

On the day following each lesson the class was given a test on the subject-matter of the film or lesson. These tests were standardised ones of the "New Examination" type, and were the same for all groups. Different arrangements were made for the Composition test, which followed directly after the film or lesson, lesson and composition taking approximately one hour.

The special operator, Mr. McLellan, took the cinema machines and films from school to school, and gave all periods headed Method B or Method C. Periods headed Method A were given either by head teachers or class teachers: these lessons were in no case to exceed one hour in duration, and there was to be no special coaching subsequently for the test.

Heavy handicaps were placed upon the films at this stage of the experiment. The control group P at North Melbourne, which had all six subjects by class lessons, and did not see the films, was taught by its own form master, Mr. Frank Hurrey, who is one of the most skilful and experienced teachers in Melbourne. To compete against his expert way of presenting his subject was a formidable task for any moving picture, and it is not surprising that several of the films had to lower their colours to him. The teachers who gave the class lessons (Method A) in the other schools were, without exception, the most expert teachers in a group of schools specially staffed for work in the training of students. Thus the films were not competing with the average teacher, but with the best type of teacher in the service.

Moreover, the teachers who gave the class lessons were supplied beforehand with a summary of the points dealt with in the corresponding films. The teachers did not see the films, but they knew exactly what information the film was attempting to convey.

In short, the moving picture was handing over to a

group of highly-skilled teachers all its subject-matter, and retained only its superior power of visual presentation.

The Committee believed that if the films could hold their own under circumstances as difficult as these, they would have proved their educational power. Later it was intended to try films under the most favourable circumstances which could be arranged, groups X and Y being reserved for this.

The final results were most interesting. The average rankings of compositions done under the three methods were as follow:—

Method A—15.11th out of 30 places.

Method B—11.33th out of 30 places

Method C—19.81th out of 30 places.

The film alone was defeated, and came a bad third, but the film assisted by a few shrewd comments from a school teacher won easily. So many factors entered into this test, such as gift of written expression and natural powers of originality, that the result defeated all prophecies. Some head teachers thought that the film would have practically no effect in influencing composition, and that Methods A, B and C would average out at almost the same figures. The important factor of incentive is very potent in composition, and this was not allowed for in forecasting the results.

Here, then, was the first victory for the moving picture, and a very signal one. The film alone was ineffective, and fell four places below the class lesson, but the film in the hands of an expert teacher was so powerful an educational weapon that it defeated the class lesson by four places. Some class teachers who scanned the allocation of methods beforehand thought that Method A (Class Lesson) would win the composition test, since the three classes working under it were two Central School groups at St. Kilda Park and a very good class at Errol Street, North Melbourne. The victorious B

Method was made up from Faraday Street, Coburg East, and the third group at St. Kilda Park.

The results for the other five subjects taken together are set out in the following table. All groups except X and Y are included in these results:—

GENERAL RESULTS. TOPICS 1, 2, 3, 4 and 5 combined.
NINE GROUPS, J to R.

Method	Number of Pupils Involved	Average Score in Group Intelligence Test	Average Score in Tests on Five Topics. (Possible Score 40)	Per Cent. Gain or Loss on Method A. Method A used as Basis of Comparison
Method A (Class Lesson)	520	132.2	28.4	—
Method B (Film with running commentary) . .	537	132.4	29.2	2.8 gain
Method C (Film alone)	520	129.9	23.0	19.0 loss

A perusal of the results shows that the moving picture, even when heavily handicapped by competing with the best teachers in the service—teachers, moreover, who had been given carefully compiled summaries of the subject-matter of the films—held its own in the competition. In fact, the film had won a narrow victory. This, of course, applies only to Method B. Method C, where the film was run through without comment, proved much less effective, and came a bad third. The latter result is not surprising, for no teacher using the cinema in his classroom would expect the film to do the whole of the work while he remained a passive spectator. Even if educational films eventually appear as “talkies” given by the best teachers in the land, the individual classroom teacher will have a vital part to play in explanation, discussion, cross-questioning and revision.

The following table shows the results under each method of all groups except X and Y for each of the five topics:—

TOPIC	METHOD A		METHOD B		METHOD C	
	Average Score in Test (Possible 40)	Average Score in Intelligence Test of Participants	Average Score in Test (Possible 40)	Average Score in Intelligence Test of Participants	Average Score in Test (Possible 40)	Average Score in Intelligence Test of Participants
No. 1 Rubber .	28.0	138	27.2	127	21.8	130
No. 2 How We Speak and Hear	25.0	126	33.4	138	25.3	131
No. 3 Origin of Oil . .	27.6	126	27.6	144	24.3	136
No. 4 Mosquito	33.2	135	31.0	127	29.0	133
No. 5 Motor Car Engine .	28.5	138	27.2	138	16.7	122

These results must be interpreted to some extent in the light of the intelligence test results of the groups concerned, but the table shows clearly that the films differed considerably in their suitability. No. 2 (How We Speak and How We Hear) was adjudged by all observers to be the best film from the point of view of dramatic teaching and educational treatment; in it Method B easily surpassed Method A, and Method C even defeated Method A. The subject-matter of No. 4 (Mosquito) was fairly well known by the children beforehand, hence the high scoring. No. 5 (Motor Car Engine), although clear and interesting, was long and technical; the three reels tired the children, while the relatively simple treatment adopted by the class teacher proved very effective.

Up to this point the inference of chief importance is that, while it must not be assumed that any film is better than any lesson, a well-constructed film can by itself be more effective than the best class teaching.

An extremely interesting psychological sidelight was revealed by Dr. Cunningham, who took 100 cases and worked out the correlation between the intelligence test

scores in these 100 cases and the scores made by the same children in the three methods, A, B and C. The results were as follow:—

Correlation between Intelligence Test and Method A05
Correlation between Intelligence Test and Method B38
Correlation between Intelligence Test and Method C52

It thus appears that the greater the extent to which the children have to depend upon the film the more does the amount which a given child gets out of it depend on his intelligence. This is contrary to the general belief amongst teachers, who are inclined to hold that films are best suited to less intelligent children because they make their appeal on the perceptual level. The analysis shows, in other words, that the brighter the child is the more value he is able to obtain from the film without being taught about it.

It remained now to try the effect of the moving picture under the most favourable conditions which could be devised, still keeping within the range of the conditions of the experiment. If the film is ever introduced into the school as an educational medium, it will probably be used to illustrate and reinforce a lesson already given in outline by the teacher. This was the procedure adopted. Two new classes, X and Y, were brought into the experiment; Subject 1 (Rubber) and 2 (How We Speak and How We Hear), both of which were effectively treated in the films, were presented to the new classes. The presentation took the form of outline class lessons given by the Chairman of the Committee, followed three days later by the films as illustration and revision. Method B was used in presenting the films. X and Y evinced the greatest of interest, showered the operator with questions, and asked to be shown portions of the film again in order to clear up doubtful points.

The same test as in the previous part of the experiment was given to X and Y on the day succeeding the showing of the films. X and Y were also given the same Intelligence Test. The previous results are repeated below, with the results of groups X and Y added as Method D:—

GENERAL RESULTS. TOPICS 1, 2, 3, 4 and 5.

NINE GROUPS, J to R.

Method	Number of Pupils Involved	Average Score in Group Intelligence Test	Average Score in Tests on Various Subjects (Possible Score 40)	Per Cent. Gain or Loss on Method A. Method A used as Basis of Comparison
A (Class Lesson)	520	132.2	28.4	—
B (Film with running commentary)	537	132.4	29.2	2.8 gain
C (Film alone)	520	129.9	23.0	19.0 loss

GROUPS X and Y. TOPICS 1 and 2.

D (Outline Lesson followed by film)	168	136.6	35.4	24.6 gain
---	-----	-------	------	-----------

Perhaps the most important deduction from these results is that the success of Method D can be taken to prove that a really good film ("good" being interpreted from the point of view of effective and dramatic teaching) is an irresistible educational medium when combined with the usual devices of a good class teacher. To obtain this high standard of result it is essential that the film should be constructed, or its construction supervised, by someone who has real teaching instincts and knows what illustrations and what comparisons will make a strong appeal to boys and girls. Film No. 2 (How We Speak and How We Hear) fulfilled these conditions, and was, for educational purposes, the best film which the Committee saw. Film No. 5 (Motor Car Engine: The Power Within), on the other hand, while very interesting and beautifully photographed, was designed for adults. It contained many excellent

comparisons and teaching devices, but its classroom efficiency would be trebled if it could be devised into smaller units and taken much more slowly.

It must be remembered that the experiment was concerned only with the amount of knowledge gained by the children through the various methods. The question of the interest aroused and the awakening of desire for further knowledge could not be directly measured in the experiment. These factors were indicated, however, in some degree in the answers to the questionnaire. Those teachers who were closely associated with the showing of the films in the schools were very much struck by the intense interest shown by the children, not only in the films, but in the subjects and tests. Keen discussions were held amongst the scholars long after the films had been shown and the tests given. In fact, a curious position arose because of this. The Committee intended to test the strength of the impressions made by the films by giving some of the classes, without warning, a similar set of tests a month later. It was thought that it would be then possible to measure the extent to which the positive knowledge had been forgotten. Some of these tests were given and the results collected, but, to the Committee's surprise, the results were on the whole better than in the previous tests given almost immediately after the showing of the film. The apparent explanation is that the arousal of interest in the subjects had caused the classes to discuss the topics and tests in great detail with their teachers and amongst themselves.

With the results of the experiment and the above considerations in mind, the Committee passed unanimously its first resolution, namely:—

Resolution No. 1.

“That the Visual Education Committee is of opinion that the moving picture, provided that it is properly produced under the supervision of edu-

cational experts, is a valuable adjunct to class teaching. The Committee, in passing this resolution, is influenced by the results of the experiment carried out in Victorian schools under the Committee's direction."

Immediately after the conclusion of the experiment, 275 of the children who had participated were given a questionnaire dealing with their attitude towards the films. Some of the questions and answers were very interesting, for example:—

How often do you go to the picture theatre?	Once per week	129
	Twice per week	21
	More than twice per week . .	2
	Occasionally	43
	Seldom	30
	Very seldom	42
	Never	10
In this experiment which of the three methods did you like best?	A (Class lesson)	1st Preference . . 7 2nd Preference . . 38 3rd Preference . . 159
	B (Film plus comments)	1st Preference . . 188 2nd Preference . . 10 3rd Preference . . 6
	C (Film alone)	1st Preference . . 11 2nd Preference . . 156 3rd Preference . . 37

Some of those questions could, of course, be given only to the children who had experienced the three methods. This accounts for the varying total numbers.

Do you think films should be used regularly in the schools for teaching purposes?	Yes	261
	No	8

What particular subjects would you like to see illustrated by films?	Geography gained most votes.		
	History came next.		
	Science third.		
	No other subjects came within appreciable distance of these three.		

Do you consider that the pictures seen at the theatres are, on the whole, more enjoyable than those you saw in this experiment?

Yes	144
No	201

Do you think it would be a good idea to include, in picture-theatre programmes, pictures such as you saw in this experiment?

Yes	297
No	55

The answer to this question provides a significant comment upon some of the programmes put forward by proprietors of picture theatres to attract children. For children between the ages of eleven and fifteen years undiluted "Mickey the Mouse" soon begins to pall, but pictures such as "The Golden Eagle" and "How a Great Bridge is Built" will hold their absorbed attention on all occasions. One boy, in discussing the advisability of including in all picture programmes one picture similar to those seen in the experiment, said vehemently, "Picture theatres don't realise how interested boys would be in science and nature study on the films. Besides, think how good it would be for our parents; it would teach them something."

The second resolution of the Committee read as follows:—

Resolution No. 2.

"That this Committee also believes that the use of Lantern Slides, and of the Epidiascope, in the classrooms as adjuncts to many types of class lessons, would be of definite educational value."

Resolution No. 3.

"That the Committee recommends to the Education Department the formation of a Visual Education Bureau for the purpose of collecting lantern slides, photographs, films and other visual aids, and circulating these amongst the schools."

If each Australian State were to form its own Visual Education Bureau, there would be much duplication of effort and much unnecessary expense. A Commonwealth Bureau, with distributing agencies at each Education Department, would be much more effective. The collection and production of films and slides would then become an Australian matter, and co-operation with the Commonwealth Cinema Branch could be more easily carried out. Feeling that it was essential to emphasise this point, the Committee passed another resolution, as follows:—

Resolution No. 4.

“Realising that a Visual Education Bureau, under the control of one State, would be far less effective than a Commonwealth Visual Education Bureau, the Committee recommends that the Victorian Education Department communicate with other Education Departments in Australia, with a view to joint action in urging the formation of a Commonwealth Bureau.”

Resolution No. 5.

“In view of Resolution No. 37 of the Report of the Royal Commission on the Motion Picture Industry in Australia, published in 1928, viz.:—

‘That the States, recognising the advantage to be gained by the use of the cinema as an adjunct to educational methods, should be assisted in every way by the Commonwealth,’

this Committee is of the opinion that the Commonwealth Government should provide funds for the formation and maintenance of a Commonwealth Visual Education Bureau, by allocating for this purpose a percentage of the duties collected by the Customs Department on imported cinematograph pictures.”

The Committee realised that much time might elapse before the machinery could be set in motion to estab-

lish the Commonwealth Bureau referred to in Resolutions No. 4 and 5. Much valuable preliminary work could be carried out by a Victorian Bureau, established at once. The final resolution of the Committee dealt with this very important point.

Resolution No. 6.

"That, pending the establishment of a Commonwealth Visual Education Bureau, this Committee urges the immediate formation of a State Bureau, as recommended in Resolution No. 3. If the State Bureau were supervised by an officer of the Education Department, seconded for the purpose and aided by a Standing Committee for Visual Education, the annual cost of maintenance would be small."

I wrote in the Foreword to this Report as follows:—

"The conclusions I draw from this valuable report and other reports are:—

- "1. That there is a place in the school for the moving picture;
- "2. That to be of educational value pictures for schools must be specially prepared to fit the curriculum;
- "3. That the value of the picture is greater in certain subjects—Geography, Nature Study, Science and History—than in others;
- "4. That a Visual Education Bureau should be established for the collection and supply to schools of lantern slides, films and other visual aids.

The supply of necessary projection apparatus should be a matter for local effort, and the films, etc., should be supplied free on application, the locality also bearing the cost of transport and insurance.

"It is considered that one Bureau for the whole Commonwealth would suffice for some years to come.

"5. That as a rule it is not advisable to allow children to attend picture theatres during school hours as part of their attendance at school. The disadvantages of this briefly are:—

- "(a) Excessive expenditure of time and money;
- "(b) Danger of spread of infection;
- "(c) Eye strain;
- "(d) Vitiating atmosphere in most theatres;
- "(e) Disorganisation of school work and loss of time.

"6. That while the moving picture may be made a valuable auxiliary to the work of the teacher, it is only a useful auxiliary after all, and the personality, knowledge and technique of the teacher in this, as in other fields of educational work, are of paramount importance.

"In England many schools are equipped with their own projection apparatus, and use the film regularly in ordinary instruction. Similarly, the use of the cinematograph in schools is prevalent in France, America, Sweden, Holland and Germany. To be most effective, the use of the film must be closely correlated with the regular work of the classroom, and must be supplemented by the teacher. It is as an illustrative aid rather than as the main subject-matter of instruction that the film will be found to have its real place in primary and secondary schools. The talking picture has introduced new possibilities, which have yet to be more fully examined. Meanwhile, this Report is commended as a worthy contribution to the study of the subject."

It is quite evident that whatever educational value the silent moving pictures have, this value is greatly enhanced in the case of the sound films or "talkies." As yet these are in their infancy, but they are making rapid strides. The improvements made both in synchronising the sound and the picture and in controlling the sound

have been little short of marvellous, and they will certainly play an important part in educational procedure in the future. To make them most effective, however, a special method has to be developed. As in the case of the silent picture, they must be prepared specially to fit in with the curriculum, and a supply must be readily available. Until these conditions are fulfilled, school authorities would be wise to "go slow" in encouraging expenditure on either moving or sound pictures. In London there is a circulating library of 100,000 slides for use in schools, and many schools in England have installed cinema machines. In America they are mainly used in high schools and universities. France has probably made the greatest school use of them of all countries, though they are used extensively also in Germany. Some people doubt their permanent value in education, but this view seems to me reactionary. These people contend that all education is a result of conscious self-effort, and in the attempt to make work interesting the incentive to self-effort, and hence permanence of the result and discipline of the mind, is lost. I do not subscribe to this view, which I think over-states the case. Every thinking person will, of course, agree that education cannot be "given" to anyone; each must achieve it as a result of his own efforts and acquire it for himself. As Elbert Hubbard once said, "Education is a conquest, not a bequest." The important thing seems to be to secure vivid and clear mental impression, which will remain longer than that obtained by foggy thinking, even if it is accompanied by a great deal of self-effort. Concentration of thought is important, and the picture serves to secure this, though I would emphasise the fact that with the picture as with the ordinary lesson, the influence and method of the teacher are matters of paramount importance. Probably in the field of university, adult and technical education it will in the future find its chief use.

VII.

MECHANICAL AIDS IN EDUCATION.

ii—BROADCASTING.

Let us now turn to an invention greater than the moving picture, and one fraught with even greater possibilities from the educational point of view. The transmission of speech by wireless is a development practically of the last decade or two, and there are those who think that it will lead to a revival of learning comparable to that which followed the invention of printing in the fifteenth century. Its use and possibilities are very great, indeed, and already it has done a great deal in the field of adult education. To-day, however, we need not concern ourselves with broadcasting as a means of recreation and entertainment—"taking tired people to the islands of the Blest"—nor with its various commercial and other uses. Even in the educational field it will be necessary to limit ourselves to the consideration of that new world which radio has set out to conquer, if possible—the world of the primary and secondary school. By means of broadcasting it is already possible for millions of people throughout the Empire to listen to a speech of the King or some other notability, for the people in Australia and New Zealand to hear the song of the English nightingale or the people of England and New Zealand to listen to the wonderful mimicry of the Australian lyre-bird. Radio presents almost infinite possibilities, and as yet is only on the threshold of its development. It is no longer a new toy, but is a regular part of the daily life of the community. For the first time in history, millions of people scattered over a continent can listen in to the same voice at the same moment of time without even leaving their homes.

Without being adapted for use in schools at all, the educational influence of the radio on a community must be very great. It was only as recently as in February, 1920, that the Marconi Company in England first was

able to broadcast each day two half-hour programmes of news, songs and music. In 1922 evening programmes were provided, and the British Broadcasting Company was formed, and reconstituted by Royal Charter as a public corporation in 1927. In 1923 there were fewer than 160,000 licenses in England; to-day the number is over 3,000,000, which probably means that there are over 10,000,000 listeners in England alone. The development in other countries has been on a similar scale. I shall not attempt to describe the different kinds of transmitting stations, the variety of wave-lengths employed, or the recording instruments that have been devised. Suffice to say that in all countries the educational value, both in its wider and its narrower sense, has been recognised as one of the important functions of this new invention. In England, since 1923, as local stations were opened Advisory Committees were established in all cases, and these generally included the Directors or Secretaries of Education, representatives of the Universities, and representative teachers. The Board of Education nominated one of His Majesty's Inspectors to attend meetings of the Advisory Committee in London, and after a few years Mr. J. C. Stobart, the Board's representative, joined the permanent staff of the British Broadcasting Company as Education Director. They issued a printed syllabus of the session from October to Christmas in 1924, and the circulation of these soon increased to about 20,000 copies. "Aids to Study" pamphlets followed, and the sale of these soon grew to over 60,000 copies. When the afternoon broadcasts were extended to schools, "Talks Programmes" were printed, to be used for preparatory and follow-up work, and in 1927 about a quarter of a million of these and the "Aids to Study" pamphlets were disposed of for the autumn session alone in that year. These figures will give some idea of the growth, variety and extent of this movement. In the case of adults, correspondence with listeners has been encouraged, and this

has developed considerably. To some extent replies to inquiries can be answered at the microphone, but an organisation to deal with correspondence has had to be created. In 1928 an analysis of the programme time of the British Broadcasting Company showed that—

62% was devoted to music, of which 10% was classical music, 12% good light music, 26% popular music (including bands, musical comedy, etc.), and 12% dance music;

2% to drama and classical plays;

20.8% to talks of all kinds, including news bulletins, readings and topical talks;

15% to educational talks, of which the greater part consisted of school broadcasts.

By means of a special wave-length, appropriated for the purpose, educational broadcasts can be made at any time without interfering with other forms, but so far as the ordinary day school is concerned, a certain time can easily be reserved specially for schools within the limits of ordinary school hours. The British Broadcasting Company programme for schools in 1929 was as follows:—

Three terms, 12, 11, 8 weeks. Usually children 11 to 14 years.		
Monday	2 to 2.20	Reading in foreign languages.
	2.30 to 3	History (Miss Rhoda Power).
	3.05 to 3.20	Mythology.
Tuesday	2.30	Music (Sir Walford Davies).
		Beginners' lesson; concert; advanced course.
	3.35 to 4	Elementary French (Prof. Stephan, University of London).
	4.15 to 4.30	Special talks; international affairs, architecture, flying, and so forth; secondary grades.
Wednesday	2.30 to 2.55	Nature study.
	3 to 3.30	English literature.
Thursday	2.20 to 2.50	English speech and language.
Friday	2.30	Farming; geography, travel talks; history, art, and so forth.
	4.30	Plays and concerts.

Wireless talks bring the whole world much closer together, and will doubtless lead to a better understanding of international relations.

It must be remembered that as yet we have only touched the fringe of the subject. Broadcasting easily lends itself to prostitution for propaganda purposes, and this danger has already become manifest. Generally speaking, the types of educational courses broadcast have had mainly to do with hobbies such as poultry-raising or other farm pursuits, with various branches of science, with literature, the drama, music and various branches of art, and with the teaching of languages. The German stations have devoted a great deal of time and thought to language teaching. Their usual method in the teaching of English, for example, is to have an Englishman and a German at the microphone. The Englishman speaks in English and the German explains and asks questions in German. As the lessons become more advanced, the Englishman does more and more, and finally all the talking. The best method for various subjects has yet to be worked out. Popular science subjects, biology and nature study talks, talks on travel, history, geography, social life, citizenship, and the like, have all been given with success. "The Unseen Teacher" is a member of the staff in many schools, and it is beginning to be recognised that school broadcasting has definitely passed the experimental stage, and will ultimately justify its claim to a place in our educational system. The proper use of the microphone is, however, definitely in co-operation with the teacher, whose work it illustrates and reinforces, but can never supplant. At present the broadcast courses provided should not exceed one or (perhaps in special cases) two per week for any class, and in England permission is usually limited to this number. Before turning to the United States, I might mention an interesting course in Speech Drill by Wireless in England, which has been mentioned in recent numbers of the Educational Supplement to *The Times*

(August 23rd, 1931, and later issues). In this case special efforts are being made to test the efficacy of the method. In the case of other subjects the method of testing has usually been by means of examinations, essays and the like. In this case some 20,000 children are taking the course. In test classes gramophone records were made and kept of each child's voice before the course began. Gramophone records are to be taken on the completion of the course and improvements noted. The lessons were arranged by the Central Council of School Broadcasting, and the speaker was Mr. A. Lloyd James, a University Reader in Phonetics at the London School of Oriental Studies. Defects of speech, dialects, etc, were illustrated by the lecturer, and the class made to repeat standard pronunciation with correct vowel sounds, rhythms and intonations. Each twenty-minute lesson by wireless was followed by a lesson in the classroom by the teacher, in order to clinch the work.

In Victoria last year I appointed a strong committee to investigate and report upon the question of broadcasting as an aid to education in schools. The members have entered on their work with enthusiasm, and the Australian Broadcasting Company is co-operating in a whole-hearted way in the experiment. Throughout each term, school broadcasts by experts have been regularly made for half an hour each day, as follow:—

Monday	Human Geography, by Associate Professor Dr. G. L. Wood (University of Melbourne).
Tuesday	English Literature, by Professor Cowling.
Wednesday	French, by Mons. Th. Rouel and Mr. W. H. Frederick.
Thursday	Physical Science (1st and 2nd Terms), by Mr. Stanley Rogers. Mathematics (3rd Term), by Miss J. T. Flynn.
Friday	Music (1st and 2nd Terms), by Dr. Floyd and others. History (3rd Term), by Mr. H. Burton.

and these have been supplemented by evening broadcasts. I am awaiting with much interest the report of this Committee.

Let us now turn to the United States, where so much valuable experimentation has been done in education. Indeed, it is not too much to claim that the whole world is indebted to America for her wonderful experimental education work, not only in philosophy and practice, in organisation and administration, in curriculum-revision and methodology—to mention only a few lines of effort—but in the application of recent inventions to the service of education. Her work in visual education has already been briefly mentioned.

The report issued by the Payne Fund, entitled *Radio in Education*, published in 1929, gives an account of the Ohio School of the Air and other experiments, and this may be supplemented by the Reports of the Advisory Committee on Education by Radio, appointed by the Secretary of the Interior, the first of which was published in 1930, and the second, *Education on the Air*, in 1931. I need not delay to expound certain difficulties that exist in the States where broadcasting is commercially exploited by rival companies, whose main interest is to sell equipment or broadcast advertisements. Interesting questions of national control, wave-lengths, educational service, and political propaganda have already emerged, into which I need not enter here. Nor will time permit description of University Extension and College courses by Radio, such as those of Cleveland (Music Appreciation), Massachusetts University, Pennsylvania (the first), Wisconsin (the second to provide such courses), Iowa, Nebraska, New York, etc., etc. In November, 1922, 57 colleges and universities were reported as having telephone broadcasting stations. Dr. J. J. Tigert, who was formerly United States Commissioner of Education, stated in 1929: "In New Jersey somewhat fewer than 50% of the schools have sets. Nebraska is apparently second with 25%." He further

states that "while the larger cities expectedly have led with the installation of sets for experiment, many rural and consolidated schools have been quick to recognise their value." Let us, however, confine our attention to the Ohio School of the Air, organised by the Ohio State Department of Education in the autumn of 1928. It was a co-operative undertaking, made possible by Ohio educators, the Payne Fund, the Crossley and Ohio University Broadcasting Stations, and a number of public-spirited citizens. The first programme was broadcast for the public schools of the State on January 7th, 1929. By April of that year reports received showed that over 100,000 pupils in 22 States were listening regularly to the programmes. The Ohio State Legislature voted 20,000 dollars a year for two years for the purpose. The Secretary of the Interior was requested to call a conference on the matter. This was done, and Commissions appointed as follow:—

1. A Survey Committee to ascertain what was being done in the way of educational broadcasting throughout the United States.
2. A Research Committee to make objective studies of results of radio courses, especially in elementary and secondary school grades.
3. A Committee of ways and means.
4. An Executive Committee to co-ordinate the work of the other Committees.

This was all done in 1929.

For the Ohio School of the Air a director of school broadcasting was appointed—Mr. B. H. Darrow—who was specially well qualified for the work, and had been in charge of children's programmes at the Chicago Station. A preliminary committee of 37 members was appointed to investigate and develop the possibilities of school broadcasting on a national scale. The Committee sent questionnaires to 3000 country superintendents, principals, and classroom teachers of public schools. Of

475 replies received, 441 said they would like to have a school of the air. The number of schools represented in the 475 replies received was 12,905, and the number of teachers 42,043. The answers indicated that 5714 schools would be equipped with receivers as soon as programmes were assured. Broadcasting facilities were provided free of cost, and many of the speakers were volunteers.

Some of the difficulties raised were:—

1. That the school curricula were already full, and time could not be found for radio lessons. The reply was that no new courses were added, but the work of the teacher was supplemented in a very valuable way by experts. It was urged that it was much better for children to hear prominent leaders of to-day than to wait for later generations to study about them in text-books.
2. That the radio would not hold the attention of the pupils, as no loud-speaker has the personality of the teacher. Experience, however, showed that if the broadcasting were properly done attention was held, not only at the beginning but throughout the course. The teachers did not leave their rooms, and were free to assist the lesson with pointers or maps or illustrations, notes on blackboards, etc., and generally supervised while the radio instructors guided the classes. The two working together in this way accomplished more in the period than one teacher alone could.
3. That radio instruction would be over the heads of the children and not understood. This difficulty was met partly by grading of the lessons to suit the pupils listening, but if the radio lesson were not understood by the children all the teacher had to do was to silence the radio and go on teaching in his own way.

4. That radio lessons exclude self-activity on the part of the pupils. Investigation showed that the more progressive and experienced teachers, by preparing the pupils beforehand, and by giving special attention to backward pupils, had overcome this objection. For this purpose the lesson leaflets distributed before the lesson were very valuable.

The important thing to be remembered in connection with the various objections that may be raised is that the technique of radio instruction is as yet in its infancy. A good technique has to be developed by trial and error—in short, by experience. It should not be forgotten that the really excellent teacher on the radio reaches 10,000, or even 1,000,000, as easily as 10 pupils, and in this way the best is available for all. He relieves the classroom teacher, too, of much of the heavy work, though to get good results there must be full co-operation between the two. The inspiration to pupils on hearing the voice of a great leader, or of a famous man, such as, for example, Kingsford Smith describing a flight, would cause a geography lesson, for instance, to be long remembered. Other difficulties may be mentioned. The disturbances termed “static,” formerly so troublesome, are practically eliminated in good modern receivers, though progress in the elimination of noise is still being made. Country schools have now less trouble with this than city schools. Radio receivers do, of course, get out of order, and trouble called “fading” is experienced. School sets should be locked up when not in use, and they should be inspected regularly by a competent radio man. Distortion is a great difficulty, so that music and voices are scarcely recognisable. With improvement in receivers, this fault is being overcome. A common difficulty is to secure money to provide the sets. In Victoria this is left to the School Committees or the Mothers’ Clubs.

In the Ohio school the time set apart for school broadcasting is from 1.30 to 2.30 p.m. A suggested schedule was sent out in the first instance with a questionnaire.

As a result of the questionnaire and suggestions made, a complete working programme was fixed. Each session opened with *America, the Beautiful*, played on the organ at the transmitting station, and all the pupils sang to this accompaniment.

Monday—

1.30 to 1.45 was devoted to Health Talks by officials of the Ohio Department of Health.

"How Important is Water Supply and Sanitation," "Personal Hygiene—Keeping Healthy and Happy," "How I Avoid Ill-Health," are samples of talks broadcast.

On alternate Mondays the lower grades were led in Story Plays and Rhythmic Activities by a well-known leader.

1.45 to 2.—A discourse on current events by the Editor of the leading paper to pupils of upper grades and high schools.

2 to 2.30.—History dramalogues, *e.g.*, "The Webster-Hayne Debate," "Andrew Jackson," "In the Reign of Queen Dolly."

Tuesday—

1.30 to 1.45.—Talks by officials of the State Department of Education, *e.g.*, "Is My School Good Enough?" "The Possibilities of the School of the Air."

Chemistry lessons—courses of six lectures given by the Chemistry Department of the State University—or Popular Science course.

1.45 to 2.—Art Appreciation. Lectures on pictures by leading authorities on art—such masterpieces as "The Boy and the Angel," "Behind the Plough," Corot's "Spring," "St. Francis Preaching to the

- Birds," or Lepage's "Joan of Arc." Good reproductions of these were made available to all schools.
2. to 2.30.—Talks on Civics and Government by the Governor, leading legislators and others.

Wednesdays—

These were story days. The first period for 1st, 2nd, and 3rd Grades, the second for Grades IV., V. and VI. Plays and Playlets for Grades VII. and VIII. filled the third period.

Thursdays —

Plays for High Schools were presented on Thursdays for first half, and second half was devoted to Geography.

Fridays—

Music Appreciation by Walter Damrosch and his orchestra. (These seem to have been the most successful of all the courses.)

Dr. Walter Damrosch is one of America's most famous musicians. "The Walter Damrosch Music Appreciation Hour" consists of a lecture (part of a course) with orchestral illustrations. So popular have these become that it is estimated there are now over 8,000,000 listeners to these lectures, which are re-broadcast from 57 stations covering the whole of the United States east of the Rocky Mountains and extending into Canada. The musical illustrations are provided by one of the finest symphony orchestras in the world, and the latest programmes for the broadcasts are divided into four series, each including four programmes. The first series is concerned mainly with the make-up of a symphony orchestra, Series B emphasises different rhythms and tempos of music, Series C takes advanced forms such as the symphony and symphonic poem, while Series D includes complete work of such composers as Bach, Handel, Mozart, Beethoven, and Wagner. Four Students'

Note Books—one for each course—have been published and an Instructor's Manual. Phonograph records covering the musical compositions used to illustrate the course are also available. These go even further than the admirable records of Mr. Salter Davies in England.

Opinions sought from superintendents of schools and officials, teachers and pupils, were favourable on the whole, some enthusiastically so, and but few were adverse. For instance, the superintendent of schools at Dayton reported that the broadcasts were "extremely popular with all our teachers and pupils . . . every school in Dayton will soon be equipped, and more than 30,000 boys and girls will be listening regularly." Another report: "We are getting some very good results from these broadcasts." Another: "We are glad to report we have radios in our one-room schools in Harrison township." Most of the teachers' reports were also favourable, though some gave only limited approval, and a few were doubtful or adverse.

The Second Year Book of *Education on the Air* (1931) came to hand while I was preparing this address. It records steady growth in the United States of America in the face of many difficulties, one of the chief being the difficulty of securing broadcasts at times specially suited for school purposes. The rivalry of broadcasting companies desirous of exploiting to the full the commercial possibilities of this new means of disseminating information tends to squeeze out the schools even though a special wave-length may be assigned for educational purposes. The wisdom of the governments in Great Britain and Australia in assuming national control of broadcasting and to use it in the interests of the whole people is apparent.

Of probably even greater concern to you as teachers, however, is the fear, said to be spreading in the United States and Great Britain among teachers, that the radio loud speaker, combined possibly with television, in a few years will bring each child in contact with a master

teacher, with resultant displacement of many teachers. They have the vision of one teacher for each Grade, teaching all the children in that Grade throughout the whole country. They know, or have read, how musicians and actors have been thrown out of employment everywhere by artificial methods of producing sound, and they fear that a similar fate may befall them in their own profession. Just picture one wireless University, one Secondary School, and one Primary School, each with its special staff of super-teachers, situated suitably for the purpose, say, at Wellington, broadcasting to all the schools throughout this Dominion. Like Othello's, your occupation would be gone. Is there any real ground for the fear that you will be so displaced? Personally, I think not. Teaching is more than merely a voice dealing out subject-matter, no matter how well this can be done. The personality of the teacher can never be displaced by a shadow and a sound. Individual attention, personal guidance and oversight, proper training in social relationships, local illustrations, and applications of subject-matter, discipline and training in self-government cannot adequately be given by any mechanical device. The fear, I think, is groundless, and should not be allowed to hamper the use of radio in the class-room. Radio, undoubtedly, can be made a valuable aid to the teacher, but it seems to me it can never supplant teachers.

Another point mentioned in the later report is the vague notion that radio will make learning easy—that it will provide a royal road to learning. Education must always be a personal achievement, and the struggle to achieve it must be made by each individual. From this there can be no escape, but all hampering obstacles should be removed and all facilities possible provided to assist the individual to attain. I feel that I need not stress the individual differences in children as among themselves or the marked differences in each child in his ability to master different subjects, in order to show that

no uniform device can ever be applicable to all. Education requires activity in participation, but the radio tends to encourage passivity.

All authorities seem to be in agreement that in the teaching of music and musical appreciation, broadcasting will in the future have an important place. Music is learned through the ear rather than through the eye. Pictorial art, on the other hand, seems to offer little scope for its use. So far the main subjects used for the purposes are music, geography, science, literature, languages and history. The best arrangement is to have the radio supplied to each class-room, so that subjects suited to a particular class or stage will be provided only to those to whom it is of value, who are prepared for it by the introductory work of the teacher, who again can "follow up" the work with the class. Unless the broadcasts are related to the curriculum, the text-books used and the regular class work, it is easy to waste time. The present position may be summed up thus. Broadcasting has great possibilities in education, but for most effective use in the ordinary class-room it has many difficulties to overcome. Its widest use will probably be found in work with the upper grades in Elementary Schools, in High Schools, in Universities and in connection with adult education. As improved methods of teaching and technique specially applicable to this method of instruction are developed, the use of broadcasting as an adjunct to the teacher will undoubtedly grow. Radio is only one tool to be used in the educative process.

In the report last mentioned, W. C. Bagley, junr., attempts to make an evaluation of Schools of the Air. "I have heard epithets given to the radio ranging all the way from the most obstinate of man-made nuisances to the most valuable creation of science since the introduction of the printing press," he states. He takes various sources, such as a group of 10,000 letters received, and analyses the replies. Again, he considers the type of requests received and the indications these give.

He also considers returns from manufacturers showing the distribution of sets among schools. "From three manufacturers we received a list of more than 5,000 schools which they alone had equipped with radio. In addition, we have received figures from four cities, showing that they had equipped more than one thousand schools. It must be remembered that these installations took place within the year." These statements indicate the extent of the movement in the United States. Mr. Bagley rightly places great importance on the opinion of Superintendents of Education. "Of 27 State Superintendents of Education interviewed, 20 were anxious to bring about as broad a use of the radio as possible in the schools of their State. Two were mildly interested . . . and the other five were sceptical regarding the real value of the instrument." The corresponding figures for 25 City Superintendents of Education were 14, 6, and 5. The evidence collected showed that about 40,000 schools were equipped with radio, reaching from six million to eight million children, who receive this form of instruction to supplement their regular school studies.

What of the future? Already we have heard of a "wireless" University. Gramophone records, moving pictures, sound pictures, transmission over the air, and television, are as yet in their early infancy as educational aids, and the last can hardly be said to have arrived at all. At present they do not fit in with the school programme which must be adapted to them. This, however, is not an insuperable difficulty. The school of the future will doubtless be built to hold a library of records and one of films, specially prepared by the best teachers, for school use. The potentialities for use of these aids are as yet not exploited, but of one thing I feel we may be sure, they will never displace the teacher so long as children are children. But the technique of teaching will probably be changed greatly, and the school texts of the future may well be written so as to

be used in conjunction with mechanical aids. At present the aids we have been discussing are expensive and their use is experimental. The teacher, however, cannot afford to lag behind. The day is near at hand when each class-room will have its own screen, its own gramophone, and its own mechanical loud speaker, the use of any one of which will be available for the teacher as required. He may throw on the screen the shadow and hear the voice of any great expert on any subject as needed. He and his pupils may even be able to see great events happening in other countries while they are happening. He may even view the calving of icebergs and the active eruption of volcanoes. That day is not yet, but it will almost surely come. Just as the moving picture has aided the moving shadow by adding to it a voice, so broadcasting will call to the aid of the voice over the air the moving shadow as the experiments already made in television quite definitely show.

VIII.

EDUCATION IN AUSTRALIA.

I have been asked to speak, this evening, on Education in Australia. As you all know, Australia is a Commonwealth, formed in 1900 by the federation of six States, which prior to this were each sovereign under the British Crown. Except for the Federal Territory at Canberra, the Northern Territory, and mandated territories such as New Guinea, where primitive systems exist and are financed by the Commonwealth, the Federal Government takes no part directly in education.

In each State, education is entirely the concern and under the control of the State Government. Even in the case of the exceptions mentioned above, the Federal Government utilises teachers and inspectors supplied from the State Departments of Education. Nor does the Federal Government assist education in the States. No grants are made to the States to assist instruction in "agriculture and the mechanic arts," as is done in the United States. Each State has its own University, and these Universities also receive no grants from the Federal Government. Under our defence scheme, until a few years ago, the Commonwealth did supply instructors of physical training, and these instructed not only teachers through the agencies of summer schools and vacation courses, but also the older boys who under the training scheme were compelled to undergo a prescribed amount of physical and military training each year. Through the Commonwealth Institute of Scientific and Industrial Research, which is financed entirely by the Commonwealth, some work done in the laboratories of State Universities and with the co-operation of State Agricultural Departments is financed by the Commonwealth.

The Federal Government has not established a Bureau for the dissemination of knowledge of educational systems and practice either in Australia or in other parts of the world, such as the Bureau of Education at Washington, for example, does.

We may thus leave the Commonwealth out of further consideration so far as education is concerned. Each of the six States forming the Commonwealth has its own system which has developed independently of the others. It is remarkable that in spite of this independent development the six systems in the six States have so much in common. Each State has a system of highly centralised control, and in each the teachers are public servants. Each State has organised a system of government schools—primary, secondary, and technical—and of Universities subsidised by the State Government out of consolidated revenue, which, in spite of certain variations present remarkable similarities to those of the other States. I do not propose this evening to discuss these variations and differences. While they have their importance, they are of interest rather to students of education and administration than to a public audience. A description of one State may broadly be taken as a description of all.

The education system of each State has passed through practically the same stages of evolution since white people began to settle in Australia, the first school opened being in Sydney in 1793, less than 140 years ago. The first permanent settlement was made at Port Phillip only 95 years ago, at Kangaroo Island 96 years ago, at Moreton Bay 97 years ago, and from those settlements the States of Victoria (separated from New South Wales in 1851), South Australia, and Queensland respectively have since developed. For all practical purposes, the history of education in Australia belongs to the last 70 years, while the systems of centralised control belong to the last 60 years.

In the early pioneering days, following the English

example of the time, education was left to voluntary efforts of church organisations and private ventures. The next stage was to set up a peculiar dual system of control, known as the Board of National Education and the Denominational Schools Board. These Boards competed with each other in populous areas but made no provision for pupils in sparsely settled areas. The system was utterly unsatisfactory, and was succeeded by a Board of Education on which religious interests were strongly represented. The break from the English system followed a campaign for "free, secular and compulsory" education controlled by the State. The aim was to free education from church control, and each State in turn established a centralised system of State education under a responsible Cabinet Minister. Victoria led the way in 1872, Queensland followed in 1875, South Australia in 1878, New South Wales in 1880, Tasmania and West Australia in 1893. The churches were left free to establish their own schools, and in many instances grants of land and money were made to encourage the establishment of secondary schools by various denominations in order to supply qualified students for the Universities. The establishment of secondary schools by the different States, except for a few isolated instances, is a development of the last 25 years.

The difficult problem of giving religious instruction in schools has been settled for the time being in different ways in different States. In Victoria, no State teacher is permitted to give religious instruction in State schools. Arrangements are made under which the instruction may be given by outside persons (usually clergymen) approved for the purpose for two periods per week to children whose parents have expressed their desire that their children should receive this instruction. Excepting the Roman Catholic Church, the churches often combine for this purpose, and latest reports show that this instruction is regularly given by members of the Joint Council for Religious Instruction in day

schools to 169,635 children attending 1,701 State Schools out of a total of 257,097 children attending 2,789 State Schools. This instruction supplements the work of the churches, the Sunday Schools, and the homes. In New South Wales and Queensland, Scripture lessons have been approved, and these are given by the ordinary teachers to children whose parents do not object.

The Roman Catholic Church, and, to a much lesser extent the Church of England, and again to a very much lesser extent other churches, have always exercised their right to establish their own schools. The Roman Catholic Church in all the States has long claimed that a separate grant should be made by the State for the secular instruction given to children who are within the age limits for compulsory attendance at their schools. Such a grant has not been made in any of the States. During the last quarter of a century there has been much more inspection and supervision by the State of schools outside the control of the various Education Departments. The laws of all the States require that all children between specified ages must be under efficient and regular instruction.

Victoria has gone furthest in the direction of securing this end. In 1907 a Registration of Teachers and Schools Act was passed which required that all schools other than State Schools were to be registered and all teachers (except those of certain subjects such as religion, art, music, physical training, etc.) had also to be registered. Schools are registered as sub-primary, primary and secondary schools, and teachers also in similar divisions, and as teachers of special subjects. Before being registered, a teacher must submit evidence of having had an education up to a prescribed standard, and, in addition, of having successfully completed an approved course of training. A heavy fine may be imposed on any unregistered person who teaches any subject for which registration is required, and also on the person employ-

ing him, while a fine may also be imposed for conducting an unregistered school. The result has been a marked improvement in standards, not only in buildings, grounds and equipment, but also in teaching and organisation. This system has now been operating for about 25 years, and it is safe to say that teachers in registered schools would strongly oppose any attempt at revocation of this legislation. All registered schools in Victoria are regularly inspected by officers of the Education and Health Departments, not only to ascertain that the conditions laid down for registration and for regular and efficient instruction are complied with, but also in connection with courses for scholarship holders, and the like.

There are (1930) in Victoria 519 registered schools attended by 65,418 pupils, as compared with 2,789 State Schools, attended by 257,097 pupils.

Tasmania is the only other State that has a Registration of Teachers Act, but in the remaining States the various Education Departments do exercise some general supervision of non-State schools for various purposes.

In Victoria, the administration of the provisions dealing with registration was originally carried out by means of a Registration Committee which in 1910 was merged into a Council of Public Education, an advisory body including representatives of the Education Department (the Director being *ex-officio* President), the University, the registered schools, technical education, and various other interests.

This Council of Public Education is not an executive body excepting for the purpose of registration. It is an advisory body, but its advice on major questions has not been either utilised or sought as much as it might have been. It is hoped in future to give the Council wider powers in matters of educational importance and significance.

The difficulty with democratic forms of government is that often they are admirable to provide opportuni-

ties for talking about things but they do not always function so well when it comes to the need for action.

There is, I think, in all the States some clash of opinion regarding the political control of professional work in education. This is a problem that presumably has yet to be solved in all countries.

It would appear that if Parliament were concerned with major questions of policy and matters involving expenditure, the teaching profession might be left to solve such questions as involve curricula, inspection, examinations, and the like. It is in this field that the Council should have a future important part to play.

In Victoria, there has also been developed, during the last 15 years, a system of giving recognition to internal examinations of Secondary Schools which have been inspected and whose courses and standards have been approved by the University. The system has also been extended in part to examinations in elementary schools.

I shall not describe this system any further. I will merely record my view that it has in it the germs of a great advance in education, and it seems to me that the time is ripe for a wholesale revision of our curricula, both in Primary and Secondary Schools, with the object of casting off the dead weight that has accumulated in the course of years and bringing the curricula quite up-to-date.

The two reports issued by the Hadow Committee in England, and particularly the second report dealing with Primary Schools, stress in a very striking way the importance of curriculum revision and the giving of freedom to teachers in the details of their courses.

While America and Europe have done much in recent revisions of their curricula not much has been done as yet in Australia.

The education systems in all English-speaking countries have very much in common, the broad difference being where the system is a centralized one, as in Australia, or one of local control, as in Great Britain and America.

In Victoria, which I shall take as an example of the other Australian States, the administration of the Department consists of the Minister, who is the political head, responsible to Parliament for the time being, and the Director, who is the permanent professional head of the Department, under whom are the two main divisions of administration and inspection, consisting of chief inspectors, inspectors, teachers, office staff, medical and dental staffs.

For inspection purposes, Victoria is divided into some 30 districts, each in charge of a District Inspector.

In the case of Secondary and Technical education, each of which is under a Chief Inspector, the inspection is done by a small group of Inspectors, assisted by each District Inspector in whose district there are Secondary and Technical Schools.

For a population of approximately $1\frac{1}{2}$ million people we have in Victoria—

- A University,
- 2 Agricultural Colleges,
- 28 Technical Schools,
- 36 District High Schools,
- 46 Higher Elementary Schools,
- 26 Junior Technical Schools,
- 12 Girls' Schools (Schools of Domestic Arts),
- 2631 Elementary Schools, including a number of Central and other Specialised Schools.

For each school there is appointed a School Committee, termed Councils in the case of Secondary and Technical Schools. The idea of having a separate School Committee for each school was borrowed from New Zealand by the then Director, Mr. Frank Tate, after his visit here about 1905.

These School Committees have worked with remarkable success, and the local interest taken in schools is such that it would be no exaggeration to say that apart from the public expenditure on education, the Com-

mittees have raised through a course of years over one million pounds, which has been devoted to the schools under their charge. In other States, they are called by various names, of which Parents and Citizens Organisation is the commonest.

In recent years, particularly in connection with the larger schools, a movement known as the Association of Mothers' Clubs has been developed. This has grown very rapidly in Victoria, though for a time there appeared to be a danger of certain antagonism between Mothers' Clubs and School Committees.

It may be that mothers take more direct interest in the education of their children or it may be that fathers find less time, after the day's work is over, to give to work in connection with schools. Mothers, on the other hand, find time during the afternoons to meet at the schools and in association with the teachers they have done remarkably good work.

It must be evident that if the educational process is to be successful it must be one of complete co-operation between the home, the school, and the community. Many years ago, there was a remarkable divorce between the school and the home, but the last 20 or 30 years has shown increased co-operation and understanding. It does seem absurd that the education received in school should be divorced from that received in the home or in the community, particularly in the church. Education is a single process in which all forces should unite and this measure of co-operation is being secured to a greatly increasing extent in Victoria. We all feel that this good is something we have derived from the New Zealand practice.

This leads me to mention another recent development which led to the foundation of the Australian Council for Educational Research.

Very little research work has been done in education in Australia. As the need existed and the public demand based upon realisation of this need arose, Primary, Sec-

ondary, and Technical Schools have been established in a rather empirical and fortuitous manner.

The Carnegie Corporation of New York has promised a yearly grant of £5,000 for a period of ten years and an additional £2,500 for five years for administrative expenses for the purpose of educational research.

Institutes of Educational Research have been founded in each of the States and the General Council meets periodically. Although the first Annual Report was only recently published, the Council has already made a wonderful beginning.

In this connection, I would like to suggest that it would seem opportune that New Zealand should join in this movement, and that researches should be conducted here as well as in Australia.

I understand the Executive Officer will visit New Zealand shortly with the object of discussing the possibility of coming to some arrangement under which New Zealand will co-operate with Australia in this important work of educational research.

The first report issued by this body was a very valuable description of a system of correspondence tuition, which originated in Victoria but which has been developed even to a greater extent in some of the other States, viz., New South Wales, West Australia, and Queensland.

In Victoria we have three correspondence schools, one dealing with Primary Schools, one with Secondary Schools, and the other for infant room teachers.

The Primary Correspondence School has a staff of 15 teachers, and about 750 children are receiving this form of tuition. In the Secondary Correspondence School there are 27 teachers who give tuition to 764 children, in addition to 871 teachers who receive this instruction for First and Second Class Certificates. Each teacher has allotted to him, or her, as the case may be, a certain number of pupils. The work is planned beforehand and assignments sent out by post to the pupils.

This work has to be done, and the pupil sends the Correspondence Branch the work completed every fortnight.

One main factor of this work, and one that is essential to its success, is that the personal touch should be kept between teacher and pupil, and this is done by the remarks of the teacher on the recorded work sent in by the pupil.

The system has had a success beyond all expectations. If the correspondence school in Melbourne is compared with an actual school having a similar attendance, it is found that the pupils proceed as quickly through their grades and get proportionately as many successes at the Merit Certificate and Qualifying Examinations, and even in Scholarship Examinations, as are secured in full day-time attendance at a large school.

The system is naturally limited to children who are beyond easy reach of attendance at a school, and it serves particularly sparsely settled areas. This accounts for the greater growth of the system, because there is greater need for it, in States such as West Australia, New South Wales, and Queensland. Tuition by correspondence is also provided for children who may be unable to attend school for long periods, in some cases while they are in hospitals, and such pupils keep up their work in that way. It is a valuable contribution to education generally, and I have had much correspondence with Dr. Shatzky, Director of The First Experiment Station on Public Education, near Moscow. Doubtless, in Russian Siberia there are also many areas sparsely populated, but their great difficulty would seem to be the fact that the parents may themselves be unable to read or write. The correspondence system does involve the possibility of the parents at least having this amount of knowledge if the system is to be successful.

By means of Biennial Conferences of Directors of Education, held during the last 18 years, the problems of education in the different States are periodically dis-

cussed by the men in charge. On two occasions New Zealand has been represented at these conferences, and it is hoped that the co-operation of New Zealand in them will be a regular feature of the future.

The next conference is to be held in Sydney in May of this year.

In addition to discussing the wider problems of education, problems of administration and organisation, the conference results in a better understanding between the different States and a uniformity in the method of presenting their statistics which makes them comparable for information and research purposes.

Vocational Guidance.

In all the States of Australia a great deal of work has been done, mainly in close connection with the schools, in giving what is known as vocational guidance. Many people hold that the work of the school cannot be regarded as satisfactory unless each pupil has actually been placed in some vocation for which he or she is specially suited, and thereafter the pupil is still encouraged to retain connection with schools in order to gain wider experience and greater knowledge and skill. The complexity of the modern economic structure makes it necessary that parents and pupils alike should have available committees to help with advice and information. This work involves the discovery of individual aptitudes and interests and making the best use of existing school facilities as well as some knowledge of the past history, present position, and probable future development of various callings. As we regard it in Victoria there are three main problems to be considered, viz.:—

1. The problem of ensuring that children enter the right type of post-primary school after Grade VI.
2. The problem of choice of a suitable career.
3. The problem of placement in the chosen calling.

Educational guidance comes to the fore in the early part of Grade VI. Two letters are issued by the Department to the parents of all children in this Grade. In the first circular, published in May, the minds of the parents are directed to the need for consideration of the child's future, whilst in the second folder, issued in December, appear particulars of the various schools and courses in post-primary education offered by the Department. In this grade, entries are commenced on the vocational guidance record card which contains particulars of the attainments, personality and physique of the child. Talks by teachers on the choice of the new school are regularly given at the end of the year.

During the next two years the detailed choice of a career is under consideration. Occupational civics is included in the programme, and steps are taken to give information on various careers open to school leavers. At the end of Grade VIII. further educational guidance is given to those continuing in school, while exit pupils receive advice as to the group of work for which they are fitted. All children receive a small folder containing information on the leading occupations of the State.

Placement, even in spite of the difficult times, is most encouraging. Employers are urged to secure their junior employees direct from the schools, and owing to the efforts of the advisory committees and councils a fairly satisfactory response has been achieved. An advisory committee consists of teachers and representatives of industry and is attached to each school. This body serves to bring the boys and girls into close touch with the great world of work, helps in placement, and supervises, where necessary, until the age of 18 or thereabouts. Advisory councils are district organisations consisting of representatives of schools, employers, municipal councils, and the like, and supervise all phases of vocational guidance within their boundaries. Thirty-six advisory councils have been formed in different parts of the State. The State-wide nature of the scheme is one of its special

features, and, judging from the experience in the last two years, this move has been amply justified, for the best work is being done in provincial centres.

Ballarat's advisory council has achieved remarkable success. At the beginning of 1931 a bureau was opened on one afternoon per week at the City Hall under the supervision of an enthusiastic teacher. In the first 8 months of its existence, 995 parents and 752 children sought advice and assistance, and 207 children were placed in suitable positions. Special classes for temporarily unemployed boys and girls (over 200 in attendance) have been established, while employers co-operate in arranging "try-out" periods and in securing junior employees from the bureau. Over 210 employers so assist, and not one adverse report has been received as to the quality or suitability of the employee.

Charlton—a rural area—reports that of 151 children leaving 130 small schools in 1930, all but three either went on to higher education or were suitably placed.

Vocational Guidance Bureaus have been established in 7 centres and another 10 are planned.

A survey has been made and will soon be published of the absorptive capacity of every occupation in Victoria.

All Teachers' College students now get as an integral part of their training a course in vocational guidance.

Articles to guide teachers regularly appear in the *Education Gazette*, which also contains each month a study of an occupation.

A special course in educational and vocational guidance is included in the curriculum of all High Schools, covering the five years in these schools.

The present difficult position and the large amount of unemployment increase the importance of this work and emphasise the necessity for it.

New South Wales has established Vocational Guidance Clinics in Sydney and Newcastle, and one has recently been formed in Melbourne.

The recently formed Educational Research Council is giving very valuable assistance.

The movement for providing adult education has steadily developed in all the Australian States. University Extension Boards, acting generally in close co-operation with Workers' Educational Associations, have formed tutorial classes which continue to make steady growth. One purpose of these classes is to enable workers especially to find happiness in using their free time in a worthy and profitable way. The moral value of a people may be judged by how it spends its leisure. There is still much to be done in Australia before the position in this regard can be considered satisfactory.

But, after all, we need not concern ourselves further, at present, with any differences that may exist between education in Australia and New Zealand. These differences and peculiarities may be left to the administrator and student of education. What seems to me to be of more importance is to discuss briefly this great adventure of attempting to provide education for all the people, upon which every country has embarked. For the first time in history, people everywhere are endeavouring to make democracy safe for the world, and so save our present civilisation. The provision of education is at the present time the preoccupation of all nations, and it is safe to say that on our ability to find a solution the future welfare of humanity depends. An uneducated democracy is a manifest absurdity. Everywhere we are facing a disordered and unstable world, and it would almost seem that the situation is being faced with universal incompetence. Moscow has its five-year plan, Australia has its Premiers' plan, England has a national emergency government after one of the most remarkable elections in the whole of her history. Spain has undergone a revolution, Germany may fall to pieces at any time, and even France and America, who have cornered the world's supply of gold between them, are faced with large

deficits and unexampled unemployment. What is sorely needed is more competent and courageous leadership in the political, social and economic world. We want leaders who are not self-seekers but those who are prepared, if need be, to sacrifice themselves for the general good. What is the use of trusting to leaders who fail to understand the problems, who tell the public half-truths with a complaisant optimism, and whose actions are governed by the estimate of the votes they can secure from a deluded people? The industrial, financial, social and economic crises in the world to-day cry loudly for better leadership and for constructive reform. I am confident that the people are quite prepared to sacrifice much and to face the issues, no matter how individually unpleasant the consequences may be. The recent English election shows this. So does the recent history of Italy, where a leader has been found whom the people trust. The elections in Australia, too, seem to show a readiness to travel along the steep and thorny path in the effort to recover financial equilibrium. The tremendous problems of to-day and to-morrow have to be solved, and it seems useless to try any longer to do this with the machinery of yesterday. That is like trying to make progress with a tallow candle in an age of the million-candle power arc lamp.

The main causes of the present dislocation throughout the world appear to be fairly obvious. First of all, there was the world war with its accompanying colossal destruction of lives and accumulated capital, the savings of generations were swept away, immense credits had to be given which have strained economic systems to the breaking-point, and burdens have been imposed which the present and future generations will clearly be unable to discharge. But perhaps a factor even greater than the war in its disturbing influence on human society has been the wonderful applications of science to industry which have brought about this age of machinery and mass production. These scientific inventions

and discoveries may fairly rank among the highest achievements of the human mind, and should make this the most wonderful age in history. But these inventions largely supplant human labour, and surely it is right that human beings should not be required to slave at work which machines can do for them. Unhappily, our economic and political systems have not been adapted to these great changes. I need not labour this matter or the consequent over-production of materials and under-employment of human labour. While these applications of science have undoubtedly added greatly to the comfort and happiness of mankind, we have failed either to regulate the output or to make the necessary adjustments in the organisation of human society, economically, industrially, or politically. With the labour-saving devices at present available, not to mention even greater ones yet to come, the need for human beings to work even eight hours a day should already be a thing of the past, but, unhappily, our people have not been trained in the right use of leisure, and those who have been displaced from labour are those who least know how rightly to use their time. Until people are trained in the right use of leisure the position is highly dangerous; whereas the applications of science mentioned should do much to emancipate mankind and to enable each one to find happiness in worth-while occupations, according to his natural inclination and interest.

Another potent cause of the present instability throughout the world has been the growth of democratic institutions everywhere during the last century. Originally largely a revolt against privileges attached to wealth, position, and birth, it has so far succeeded only in transferring privileges to other classes which, though more numerous, appear to be no more worthy of them. The privileges of a class are regarded as being more important than the welfare of the whole community. Yet the ideal of a social and political system in which all privilege is abolished, in which each unit has an equal

voice in government is one well worth striving for. As yet, democracy has not had a proper trial, and it has taken many forms—all, as yet, very imperfect, and differing in different countries—and of these forms the crowned democracy of England and the really undemocratic Communist Russia to-day illustrate extreme varieties of type. All that can be said in favour of Russia is that she seems to have a plan, and the other countries have not yet evolved one. However, schemes of international co-operation seem to be on the way, and efforts made in the direction of abolishing war seem also to be bearing fruit.

My purpose in glancing thus briefly and in attempting to indicate hurriedly and very imperfectly some of the present major world problems is not to expound these or to attempt a solution, but rather to introduce a few thoughts on the part education has to play in a rapidly changing and rather bewildered world. Educationists may be divided broadly into two parties according to their attitudes. One class believes that a better social order can be evolved through the fullest and freest development of individuals but avoiding the evils of extreme individualism by permeating the whole of the work with a social and democratic spirit fostered and developed by the institutions of the school. The other class holds the view that individual development must be strictly controlled and directed by the needs of the State. In ancient times, Sparta, and in modern times, Italy and Soviet Russia, may be taken as examples of the second viewpoint. Modern Italy and Russia teach Fascism and Communism in their respective schools.

The former is the more difficult, but it allows for considerable latitude and variety; the latter is clear-cut and uncompromising. True education should result in the full and harmonious development of an individual as a social unit, and thus should provide ample opportunities for training in social adjustment. Like life in the world

around us, it should be a changing and not a fixed process. The school of to-day must educate not for work only but to an increasing degree for leisure also. As Mr. Stanley Leathes succinctly puts it, "The worth of a civilised man is the use he makes of leisure," and again, "Education must be regarded as incomplete that does not fit the pupil for the use of leisure." (*What is Education*, page 128).

In addition, the school is now called upon to play a greater part in social training, which was formerly largely left to the home and the neighbourhood. While individual effort and competition are good, these must be supplemented by co-operation not only in social matters and in games but to an increasing degree in ordinary class-room activities, and in clubs and pupils' associations. "More leisure is the prime essential of democratic government," says Hobson in *Wealth and Work* (page 248), and all inventions and efficiency methods of organisation must tend to increase the time free from that necessarily given to the earning of one's livelihood. It is the duty of the State to provide the means necessary to prepare the young for satisfactory living when the period of formal school education is over. The provision must be such as to promote their physical, economic, social, political and cultural welfare. This should not involve the sacrifice of the rights of individuals or classes to full education in times of economic stress such as those we are passing through at the present time. Consideration of the right type of education to be given should not be limited exclusively to the training of efficient workmen. We should not aim at turning out merely competent workmen, and certainly not at standardising the minds and bodies of our future citizens, but rather we should aim at full individual development and happiness. There appears to be a distinct danger in any attempt to make the schools serve solely the interests of the existing State.

In any case, we are embarked on this great adventure of public education, and on its success or failure the future of civilisation, as we know it to-day, must depend.

In the past, education has proved its power to transform the world and to regenerate the life of a nation. Unless, however, it is true to ultimate ideals it may serve a nation ill and bring about its downfall. As one example, we might take the recent history of Germany. The rebirth of Prussian education, early in the nineteenth century, undoubtedly led to the rise of Germany's freedom and greatness. When, however, it was made an instrument to serve purely national ambitions, German education ceased to be a means of national salvation, and fostered thinking and feelings—"Deutschland uber alles," "World Power or Downfall," and the like—that led to her tragic collapse. She tried to impose by force her Kultur in the world.

Indeed, it has even been urged that the present difficult position which the world is facing to-day is due to the spread of popular education.

In this connection, Mr. J. A. R. Cairns, a well-known London magistrate, recently was reported to have made some outspoken comments. He emphasised the fact that while education created great opportunities, these were accompanied with great perils, especially for the young. Youth, he said, cannot be kept in blinkers, and must choose for itself. He emphasised the dangers arising from the prominent place given in fiction to sex and sensuality and pointed out that young people obsessed with this would pay a heavy price in bitterness and disillusionment. The films, he said, in many cases made human love nauseating and revolting, and the people who were spreading this stuff over the world were fouling civilisation. The influence of the schools in their efforts to maintain proper standards of taste and conduct were being undermined by out-of-school influences over which teachers had no control. We must try to create a clean public opinion that will not tolerate

things of this sort, and parents must understand that what children do in their leisure time is really of immense importance.

My own view is that in more and better education lies the only hope of the future. The type of education to be provided is the concern not only of the home and the school but of the whole community. We must try to impart to the rising generation fuller understanding of the world they are living in, we must create in them wide sympathies and good-will to others, combined with high ideals of life and the desire to make sacrifices to attain and maintain them. Some people desire to return to the simpler life and the primitive education of the past. That is impossible. In this age of the 200 miles per hour aeroplane we cannot limit education to that suitable to the period of the bullock-waggon, and in this mechanical age of Henry Ford we must realise that an education formerly regarded as sufficient for a village blacksmith will not now nearly suffice.

The difficulty is to reach some common agreement on a matter of such vital importance. Each individual imagines he knows all about education. During my own life-time it has changed from being a comparatively simple process to a highly complicated and difficult one. Formerly it implied simply imparting a limited amount of what was regarded as fundamental information. Nowadays, the difficulty about knowledge is what the light cynic remarked of a certain lady's past, "There is too much of it."

But everywhere throughout the world there is increasing recognition not only of the national importance of education but of the difficulties. It may well be that the younger countries of the world will give a lead in finding some solution. We must not run away from the difficulties. Australia and New Zealand are too young to fall easy victims to the maladies of disillusionment, scepticism and fear. With the courage and virility of youth, these countries will retain their belief in great ideals, and so long as they are true to themselves

and these ideals, their difficulties will certainly be overcome, and they will achieve that high destiny which the future holds in store for them.

We adults have been living in a fool's paradise. For years past we have been making a rake's progress, spending borrowed money (and even borrowing more to pay the interest on what we had previously borrowed) in utter forgetfulness of the fact that the day of reckoning must inevitably come. Now that it has arrived we should not adopt Hamlet's attitude of self-pity. Let not one of us say with William Morris,

"Dreamer of dreams, born out of my due time,
Why should I strive to set the crookèd straight?"

Rather the fact that "the world is out of joint" behoves each and all of us to gird up our loins and to settle down to the job of unravelling the tangle. The way will be long and full of difficulty; the path is beset with thorns; heavy sacrifices that must affect each of us individually will have to be made. After passing along a veritable *via dolorosa* let us hope that we shall find the way out to a brighter day, better and stronger as a people for the tribulations through which we have passed. If ever there was a clarion call for service rather than for self, surely it is now. We must give to the rising generation a square deal by providing them with the fullest educational opportunities so that they may be wise and skilful enough, not only to clear up the mess we have made of things, but also to avoid its recurrence. If we do not do this then we are recreant to our trust and responsibility. That same spirit which was evoked in the war must be revived so that we shall carry on and see the business through in spite of disappointments and even disasters. We must stick it out to the end. If this great task is undertaken by all in the right spirit, there can be no doubt that we shall have a successful issue from our difficulties. But, on the other hand, if we are animated by individual and group selfishness, then we shall certainly fail. In that case, we shall deserve all we get.

IX.

OUR CHANGING EDUCATION.

*An Address to the South Australian Teachers' Union
given at Adelaide, August 17th, 1929.*

To say that we are living in a world of change is a trite truism, so hackneyed that we give the statement mental assent and think no more about it. Yet it is well that we should realise more fully the wonderful age in which we are living. In past times there have been revolutions of thought and great world changes, such as those brought about by the acceptance of Christianity by the people of Europe, the invention of Printing, the Renaissance, and the application of the forces of nature to the service of man; but the revolution through which the world has passed during the last twenty-five years has been on so stupendous a scale that those of the past, important as they were, are by comparison of much less significance. In any case we know the history of those great movements of the past, their causes, their developments and their effects. We are living in the present and may wonder whither the present tendencies are taking us and what the future of man on this planet will be like.

The world has emerged from the disaster of the greatest war in history in which empires crashed, millions of men were killed, and the whole social and economic structure of society has undergone violent change. A new political philosophy has emerged—the ideal of a world safe for democracy and of the attempt to evolve a form of democracy safe for the world.

We are living in the Heroic age of scientific achievement in which one marvellous invention follows another so rapidly that we almost cease to wonder at the greatness of man's achievements in gaining superiority over his environment. Every week still brings forth its tale of wonders, and the future is full of endless possibilities.

Somehow, we seem to have become somewhat blasé, a little disillusioned perhaps, in the endless struggle upwards towards man's perfectability, and have lost some of our earlier enthusiasm and hope. It has become abundantly clear that the world cannot be saved by machinery and that all our inventions which have increased so much our comfort and the dignity of life have not really changed man's nature. Power over nature has not made us more godlike or even more human, in some respects it makes us more terrible. It has even been argued, and with some plausibility, that Science is too dangerous a tool for us and its use is attended with great risk. It has been stated that Ignorance saved the world in the recent war, and if we take the development of the use of poison gas as an illustration there seems to be some force in the statement. The Carnegie Endowment for International Peace publishes monthly booklets on International Conciliation. That issued in March last is entitled "Chemical Warfare—its possibilities and probabilities," by M. K. Fradkin (No. 248). A table on page 46 shows that there were nearly 909,000 gas casualties in the war, of which over 78,000 were fatal.

The use of poison gas in the late war was merely child's play compared to what it may be in the future. Many new and more lethal gases than were then known have since been invented, and in a press despatch of December last one was described by Dr. H. I. Jones in Chicago thus: "It is a deadly poison and would destroy armies as one would snuff out a candle. I do not believe that nations of the world want to use it for warfare, simply because it always kills. War, if it comes again and is to be deadly, will never again be fought with shot and shell. It can't be, for it is so much cheaper to destroy life wholesale with this new gas. It may be manufactured at the rate of thousands of tons a day, and it costs less than powder and cannon, yet it will destroy armies more thoroughly,

more effectively, more quickly." It is called by Dr. Jones cacodyl isocyanide. Had this gas been known ten years earlier, who doubts that it would have been used? Apparently, it would have made a pretty complete job of the whole ghastly business. What about the next war? It would almost seem that the ascent of man in his toilsome journey towards attaining a higher civilisation will end by his committing the most elaborate and effective suicide.

Reason revolts at such a conclusion. Like Sisyphus of old we must gird up our loins again and renew the unending toil of trying to lift humanity to still higher levels. In this effort the work of the teacher has become more and more important. The schools are the real strongholds of our civilisation and in them lies the main hope of the future.

But even if this be granted (and I feel that faith is growing and spreading more rapidly) it is by no means clear what precisely the teacher is to do. What do we mean by education? What are to be the aims and objectives of our teaching? You will all remember in your reading of the history of education and of educational reformers how aims have changed from time to time. Let us glance briefly at a few.

Plato, the great Greek philosopher, states his aim thus in his "Republic": "Then in our judgment the man whose natural gifts promise to make him the perfect guardian of the State will be philosophical, high-spirited, swift-footed and strong. . . . This, then, will be the original character of our guardians, but in what way shall we rear and educate them? . . . What then is the education to be? Perhaps we could hardly find a better than that which the experience of the past has already discovered, which consists, I believe, in gymnastics for the body and music for the mind." He then proceeds to analyse the different divisions of gymnastics and music, under the former emphasising temperateness, happiness and health of the body, and under the latter including narratives, fables, poetry and songs.

Next let us take Comenius, who assumed that the aim of education was to bring to full growth and development the seeds of learning, virtue, and piety planted within us by Nature. In Quick's *Educational Reformers* his course for the vernacular school is: "In this school the children should learn—first to read and write the mother-tongue well, both with writing and printed letters; second, to compose grammatically; third, to cipher; fourth, to measure and weigh; fifth, to sing, at first from popular airs, then from music; sixth, to say by heart sacred hymns and psalms; seventh, catechism, Bible history and texts; eighth, moral rules with examples; ninth, economics and politics, so far as they could be understood; tenth, general history of the world; eleventh, figure of the earth and motion of the stars, etc., physics and geography, especially on native land; twelfth, general knowledge of arts and handicrafts."

This universal knowledge is in great contrast with the aims of Plato, and it is difficult to see how the study of some of these subjects contributes to the development of virtue and piety, which he stresses in his aim. Each of the above is an example of a purely ideal curriculum divorced from actual activities to be pursued later.

Spencer gave "complete living" as the aim of education, but instead of showing what qualities are necessary for complete living he indicated what activities were to be carried on. These he placed in five divisions, namely, those having to do with (1) Self-preservation; (2) earning a living; (3) the duties of parenthood; (4) activities of citizenship; (5) occupations for leisure. He then proceeded to show that the curriculum should consist of the natural sciences. Had he analysed these activities more fully he would probably have found that the natural sciences were inadequate for the purpose. In any case, he ignored the ideals necessary for what he termed "complete living." For

instance, self-preservation, or the earning of a living, may be secured at the expense of ideals, and either may be of less importance than the ideal of unselfishness. Modern educationists are practically in agreement that the aim of education should be stated in terms both of ideals and of activities in order to determine the content of the curriculum. Dewey's statement that education is a preparation for life's worthy interests and activities through participation in them marks definitely the change from the older to the present attitude. "The first duty of education," according to Dr. T. H. Briggs, "is to teach people to do better the desirable things they are going to do anyway. Another duty is to reveal higher types of activities and to make them both desired and to an extent possible." In all the cases quoted the main purpose of the school through the centuries has been to make good citizens, but the idea of what constitutes a good citizen has changed with different times, places and peoples. At one time, the main stress has been laid on training brave and efficient soldiers to defend and extend the homeland; at another time or place, it has been to impart a knowledge of religion, to make people good in this world and to secure a happy future in the next; again the stress has been laid on the acquisition of knowledge, especially of the past by the study of the so-called cultural subjects, and again, the emphasis has been laid on what is now termed vocational training or the preparation and training of the individual for his future calling. But whatever the ideals at any particular time and among any particular people may have been, the school has been looked upon as the agency of fostering and developing the prevailing type of civilisation.

It is not possible to compress into a single sentence the totality of the aim of education. While fundamentally our objectives to-day are in many respects similar to those of the past, *e.g.*, the teaching of moral-

ity, health, etc., the emphasis is different. To-day is the threshold of to-morrow, and the children of to-day have to be trained to face life not as it has been in the past but as it will be, so far as can be foreseen, in the future. One great characteristic of the present and immediate past is change—change on a scale so great and occurring so rapidly as to be unparalleled in past history. While in the past schools may have been regarded as adequately discharging their functions when they imparted the traditional knowledge and skill which the past has shown to be successful and which with a slowly changing world remained successful, that is not nearly sufficient for the schools of to-day.

I have already mentioned some of the great changes of our time. Do we realise how rapidly these have changed the world? Take communication for example. I suppose it would be correct to say that Julius Caesar could send a message from Rome to Paris just as quickly as Napoleon Bonaparte could send one from Paris to Rome nearly two thousand years later. The time taken was as short as good roads and horses could make it. What in either case then took days to accomplish now can be done in as many seconds. Since Napoleon's time, transport of goods has been quickened by the invention of the steamship, the steam railroad, the automobile, and the aeroplane, and communication by the telegraph, the telephone, and wireless. Months elapsed after the termination of the Franco-German War in 1871 before the news reached Australia; in the late war we had the news in as many minutes.

On the industrial side there is the tendency to aggregation, and to mass production in which machines multiply the output and man's individual skill is sunk in machine production. The individual becomes more and more dependent on others, and the proportion of those adults who work under others is steadily increasing, while the work of the individual too often is merely repetitive. These movements are already having very

far-reaching effects, especially on the mental outlook of people. Along with these movements has developed a greater tendency towards individual liberty and freedom. This tendency has been strongly marked in the schools and has found expression in various ways of which pupil self-government, the Dalton plan, the prefect system, and the like are examples. In the social and political sphere it has expressed itself by the development of what are called democratic institutions. In natural association with all the aspects of this tendency in favour of individual rights of freedom both of thinking and of action has been a weakening of authority. The revolt against the authority of the Church is an old story, but it still goes on. It was followed by revolt against the authority of the Bible which many desired to put in the place of the old authority of the Church. One sees it on a big scale in the revolt against the authority of the laws in different countries, but the aspect that most nearly affects the school is the rising revolt against parental authority and the decline of the older sanctions of conduct. Examples of this attitude will occur. Ballard opens his book, *The Changing School*, by stating that "Honoured Sir," under which title William Pitt, junior, began letters from school to his father, has been replaced in modern times by "Dear old Bean," or some such expression, and the end is generally a request for more "tin." He also quotes Mr. Frederick Lampson, who feared his father and apparently also his own children: "Now and then I propose to send my children on an errand and apologise for doing so. They accept the apology, but they do not go." I read somewhere about a cultured American mother whose son wrote to her from the front as "Dear Old Scout," which expression at first rather shocked her, but she became reconciled to it by the reflection that it expressed the true spirit of democracy. It is, however, in the field of morals and properties that the revolt is most marked. Too often it is now not sufficient

for a parent to say that certain things are wrong because the Bible says so or the Church so teaches, or because it is not customary—"it isn't done." To say that nice girls don't go to certain places, or smoke cigarettes, or drink cocktails or do certain things seems to have failed as a deterrent, and this revolt of youth at times seems to have got beyond control. But whatever misgivings the older generation may have, modern youth seems very sure of itself, and if at times it is troubled by doubts these are not much in evidence. It is small consolation that in this revolt of youth Australia does not lead the world, though we are not hopelessly eclipsed. We have not experienced yet the scandals of the sororities, fraternities, and secret societies in schools and colleges which caused so much concern in America not long ago. The idea of the companionate, or, still worse, the trial marriage, is still only an idea, and has not yet become a practice that receives public recognition here. Nor have night clubs and the like become such a feature as they are in England. There is real danger that this defiance of authority which is apparent in so many ways may for a time lead to moral chaos.

The attitude of unrest and revolt is not confined to our adolescents; we see much the same kind of thing in our political and industrial life as well. If the situation is viewed judicially, I think many will agree that it is by no means hopeless, that while in the present there is much we regret, there is also much that is admirable. Many young people are taking life seriously and are doing some hard thinking. With the loss of the foolish prudery of the past there has been a gain in frankness and honesty which augurs well for the future. The cause of our social unrest seems to me to lie in our rapidly-changing environment, due to invention and application. I read recently somewhere that there are already over six thousand different applications of electricity to the service of man. That is just one instance of developments in the last half century or so which

have made the present age so wonderful. No wonder we sometimes catch our breath and wonder if we can keep up with the pace.

Will the rate of change slow down? We see our political, legal, educational, and social machinery lagging behind requirements and problems mounting up on all sides. Inventions continue, populations become industrialised and group themselves in cities, family life declines. Is the whole of civilisation getting beyond control? So far as the evidence goes the conclusion seems inevitable that there will not be a slowing down in the rate of change for a long time to come, but rather that even greater inventions will be made in the future with resulting greater changes in society.

Already, while many of the demands made on education remain unaltered, many new demands have been made, and it appears certain that these demands must increase. As a preparation for the adult life of to-day the older education may be regarded as having failed. It professed to prepare for a life where the conditions were stable and too often for a kind of life that had passed away, or at least very materially changed, before the child was born. Its subject matter was conventionalised, its theory stereotyped and hidebound, and not adjusted to the needs of present social interests. In place of preparing for what was at best a partly-imagined and changing future, it concentrated on the past and ignored the future and even the present. These social changes must be recognised. It is futile to ignore them. In this connection it is emphatically not true that "the more it changes the more it is the same thing," though the change in human nature seems almost infinitesimally slow. The problem of the teacher is how best to prepare the rising generation for a very unsettled and uncertain future. When people ask, "What is wrong with education?" I reply, "What is wrong with Life?" For education is life as well as a time of preparation, and our teachers and educators have undertaken

the highest and greatest responsibility in the world to-day.

How are they meeting the demands of the present situation, and can we state precisely what these demands are? The social changes due to the wholesale industrialisation of populations have been mentioned, and these changes have re-acted on home life. In Australia these effects have not been so marked as in some other places, but even here the disintegrating effect on the home of modern conditions is evident, especially in our cities. The increased stimulations to excitement through the press, picture shows and wireless have varied educational effects, some good, some bad. In the past the influence of the school was supplementary to those of the home and of the community; to-day the school has to play the dominating part. It must more and more be a place where actual living goes on, and it must teach and practise the necessary moral-social habits as a basis for the fuller responsibilities of adult life.

Unless the tendency is consciously counteracted, specialisation in industry, which forces the work into a narrow groove, brings with it narrowness of outlook and strong group consciousness, often accompanied with a selfish disregard of the welfare of the people as a whole. Examples of this will readily occur. It is the part of the school to cultivate breadth of outlook, to make the individual feel the relation of his work to social well-being and stimulate interest in co-operation with those larger movements aiming at the improvement of the whole of society. On a still larger scale the tendency to provincialism and even nationalism has to be combated. So long, however, as the law of the jungle in the form of lockouts, strikes and the failure of arbitration methods prevails, when groups are fighting groups, often with a callous disregard for the welfare of the whole, and with utter inability to view social problems on the large scale on which they exist, it

seems quite visionary to expect international forbearance and understanding. In this higher sphere group consciousness is given the more dignified name of patriotism. But just as an individual or group can no longer be allowed to be the sole judge of its own conduct and actions, so the sovereign state can no longer be permitted to be an international anarchist, free to do just as it chooses without regard to the rights, feelings and opinions of other nations. Communication has brought the various nations of the world into much closer relationship, and the League of Nations is the outstanding example of the effort to introduce law and order between nations. Here, again, the part to be taken by the school is very important.

If democracy is to be made a safe means of government—and surely it is a magnificent ideal—then the school must play its part in making a success of it. Educational theory teaches us that we learn by doing, and that what we do not practise we do not learn. If democracy is to succeed we must practise it, the people must learn it and our schools must teach it. Our schools, then, must be imbued with the democratic spirit and attitude. This represents a great change, since in the past our schools have been in the main autocratic institutions, where children have been taught implicit obedience to the rulers—that is, the teachers. The very word “docility” or “teachableness” implies the idea of a passive receptivity which is in essence anti-democratic. This idea has still wider implications. In the past teachers have themselves too often been treated autocratically, and as a natural result of this they treated the children autocratically. In fact, the conditions in the larger schools where teachers were, and still often are, required to teach large classes, force on the teacher methods of mass instruction in which the individual is forgotten. To give the teacher a reasonable chance, it would thus appear that classes should not exceed thirty to forty pupils. How far individual liberty can be

developed is a most difficult and debatable problem. Is a central authority, such as an Education Department or a University, to impose on the teacher precise directions as to curriculum and method, as is largely the practice in Australia? Is the teacher to be given a large measure of freedom to develop his own curriculum, as is done in England? Or is the right of self-determination in the way of options to be given to the pupil in these matters, as happens in many of the schools of the United States? Time will not permit of a full statement of this important aspect. The right path is by no means easy to find. Manifestly there must be a sharing of joint responsibility, and we must aim at increasing, so far as possible, the efficient self-direction of the teacher. While administrative checking under any system of delegation is more difficult and the cost is probably greater, we must by experiment and trial find our way through the difficulty. Progress must be slow, but one thing is certain. If our schools are to prepare for life by active participation in life's activities, then the old autocratic methods must be radically changed. The spirit of joint responsibility, the sense of partnership and the practice of mutual consultation between inspectors, teachers, parents and pupils must be cultivated along with the British attitude of common sense and compromise.

In all conscience our problems are big enough, but compared with other countries we are fortunate. South Africa, with its two white races at variance and a mixed native and Indian population, has much more difficult problems to face. So has America with her tremendous racial difficulties. We have a white population, mainly British, and, given the right attitude of research, of mutual forbearance and goodwill, there is little doubt that we shall find the right means of adjusting our education to secure the greatest good of the greatest number.

To realise better what is involved in our changed and

changing education, it is necessary to glance briefly at schools as they were and as they are to-day. We need not take too literally the words of that bright angel of revolt, Shelley—

“there rose
From the near school-room voices, that, alas,
Were but an echo from a world of woes,
The harsh and grating strife of tyrants and of foes.”

In his book, *The Changing School*, Ballard gives in the first chapter, entitled “Floggers Ancient and Modern,” a picture of a long period of time from the “Orbilius plagosus” of Horace down to the present, during which both parent and schoolmaster regarded the rod as inseparable from instruction. He mentions Saint Augustine’s first prayer that he might not be whipped at school and the tradition that Milton was whipped at the University of Cambridge. Samuel Johnson’s old schoolmaster at the Lichfield Grammar School is also mentioned: “He never taught a boy in his life: he whipped and they learned.” Thackeray’s account of the heavy pedagogue in *Pendennis* he quotes as typical: “Your idleness is incorrigible, and your stupidity beyond example. You are a disgrace to your school and to your family, and I have no doubt you will prove so in after life to your country. A boy, sir, who does not learn his Greek play cheats his parent who spends money for his education. A boy who cheats his parent is not very far from robbing or forging upon his neighbour. A man who forges upon his neighbour pays the penalty of his crime on the gallows. And it is not such a one that I pity (for he will be deservedly cut off), but his maddened and broken-hearted parents, who are driven to a premature grave by his crimes, or, if they live, drag on a wretched and dishonoured old age. Go on, sir, and I warn you that the very next mistake you make shall subject you to the punishment of the rod.”

Is the type of schoolmaster here portrayed quite extinct? The praise given to Nicholas Udall, one time

headmaster of Eton, as "the best schoolmaster and greatest beater of our time," sounds strange in these days. Busby of Westminster, famous as the man who kept his hat on in the presence of Charles II lest his boys should think there was a greater man in the world than he, was also a famous flogger. Keate's record at Eton is said to have reached its highest mark in the school rebellion of 1832, when "late one Saturday night, after the boys had gone to bed, he had them brought in small relays, and he flogged without pause until the small hours of Sunday morning. On that dismal night," states Ballard, "at least eighty boys paid the penalty of their misdeeds."

Keate is said to have been the famous man who thus commented on the Sixth Beatitude: "Blessed are the pure in heart. Mind that; it is your duty to be pure in heart. And if you are not pure in heart, I'll flog you." The other story of the group of boys who came to him for confirmation and were mistaken for boys sent to him for punishment is well known. He promptly set to work, and was half-way through the group, when one boy spoke up and explained the position. "Sir," said Keate, "the profanity of your excuse but makes your offence the greater," and he continued flogging until he had finished the batch.

These were, of course, the days before free schools were established, and these things occurred in schools for the sons of gentlemen. When popular education was provided this tradition of discipline was handed on. Curtis and Caldwell, in *Then and Now in Education*, state that in Boston in 1845 an average public school of four hundred pupils gave sixty-five whippings a day—one whipping for every six minutes. In the same year, according to Kilpatrick's *Education for a Changing Civilisation*, "hundreds of rural schools in Massachusetts had to be abandoned because the pupils drove their teachers away. Massachusetts stood then probably at the top in our country." What happened in the other States is left to the imagination.

In those days school was a dreary prison and its iron discipline an alien thing to the child. Doubtless the methods had their value, but I think no one will deny that the school of to-day is an infinitely wholesomer and happier place. Then the child looked forward with delight to the time when he could escape from the thralldom of the older school, and though, perhaps, this feeling has not entirely disappeared, there has been a great change. The object of the teaching was too much the mere memorising of facts—often disconnected and meaningless, and useless except as a foundation to be built upon. Too often this was not done, and the child left school with a nausea for learning caused by mental indigestion of unsuitable facts crammed into his mind.

To-day we have discovered the child and the study of psychology has changed the attitude of both teachers and pupils. From the beginning, even in the kindergarten, children are taught to observe and to think and to express themselves freely. Much of the old knowledge has been cast into the rubbish heap, and that has been retained which is of proved value for present and future use. So much does the new work appeal to the children that in some cases the child's interest in the school is even greater than his interest in the home. The picture of the school boy with his shining morning face creeping unwillingly to school no longer holds true. Not only are children better developed mentally and socially, but the schools are now regarded as the places for improving the national physique.

School medical and dental inspection, physical training and games have worked wonders. It is stated that in England the average child of fourteen is an inch taller and four pounds heavier than was the case eight years ago. No one can doubt that the early discovery and treatment of defects of teeth, eyes, throat and body generally are doing much to give each child a better educational opportunity with resulting greater national advantage. Children come to school cleaner and more

sensibly dressed. They are treated as reasonable beings, and to this they give a wonderful response. They enter naturally into a life and a work the purpose of which they understand, and the old methods of repression and discipline have in general disappeared.

Much work has been done, especially in the last twenty years, in curriculum revision and construction, and in a modern curriculum the inclusion of any section of a subject must be justified by its value in achieving the aims and objectives of the course. While it is difficult to say which of the many recent changes are the most important, that of curriculum revision must hold a very high place. The curriculum is no longer static, but fluid. The claims for admission of new subjects and new branches of existing subjects are constantly being urged, and these must be weighed and considered in the light of modern educational aims before being accepted or rejected. In other words, education is life, and, like life, it is constantly, if slowly, changing.

Since psychology has shown that the brain and hand react on each other, more manual training involving the use of tools has been introduced. No secondary school course can now be regarded as satisfactory which does not make adequate provision for manual training both for boys and girls.

I have mentioned already the social work of the school. This is becoming every day more important. In a good school, civic virtues flourish, and the exercise of these virtues in the school has a wonderfully beneficial effect throughout life. A school in which scope is not given for the exercise of forms of pupil self-government is failing in one of the chief aims of education. The prefect system, the system of form captains elected by the pupils' safety-first committees in city schools, "The Little Commonwealth" movement, the management of their own games by children, school debates and social hours, are all admirable. It will be found that children, if entrusted with it, are worthy of responsibility,

and that the judgment of the general body of pupils in electing leaders or representatives is very rarely at fault. Even in the elementary school much is done in these directions. Usually school standards of conduct are very high.

Another very important change in recent years is the increased recognition of the value of prolonging school life. This has led to the widespread establishment of post-primary schools of various types in different countries, and has involved much readjustment in organisation. The elementary school is no longer an end-all in itself, but is merely a stage in the educational process, a stepping stone to the next stage. It is a truism that there is a great development in the child's mind and interests beginning at the age of about eleven or twelve years. For a child to leave school on reaching the age of fourteen years, "just as the golden period for education is beginning," as is allowed by law in the Australian States, is a national waste of our greatest opportunity. We miss the great harvest the succeeding years would bring. In none of the States is the organisation fully adapted to meet this, but much is being done. To be successful, varied forms of courses are necessary and also different types of schools, with the emphasis rather in the direction of industry and technical education than towards the University.

We are undoubtedly advancing, and the magnitude of the changes I have merely indicated but serves to show us how much further we have still to go. By what means have these advances been made possible? I reply, unhesitatingly, by the new race of teachers who, in spite often of great discouragement, have kept the vision and followed the gleam. It is true, as Ian Hay says, that ours is "the most poorly paid and the most richly rewarded" of all the professions. Not all teachers are apostles, and yet to be a really successful teacher requires both missionary zeal and apostolic fervour. But each year the young teachers coming from our

Teachers' Colleges enter the profession with the spirit of young Galahads facing the great adventure. To uphold and pass on to successive generations of boys and girls our civilisation, to develop in them character and honour and integrity, to prepare them to face a changing and rather uncertain future—what a responsibility it is, and what a clarion call to service.

In the words of Browning may each of you be:

"One who never turned his back but marched breast forward,
Never doubted clouds would break,
Never dreamed, though right were worsted, wrong would triumph,
Held we fall to rise, are baffled to fight better,
Sleep to wake.

No, at noonday in the bustle of man's work-time
Greet the unseen with a cheer;
Bid him forward, breast and back as either should be,
Strive and thrive: cry 'Speed—fight on', fare ever
There as here!"

X.

SOME IDEALS OF AUSTRALIAN EDUCATION.

An Address delivered at the Tenth Annual Education Conference of the Federated State School Teachers' Association of Australia at Melbourne, January 6th, 1930.

Those of you who have read Horne's book entitled *Idealism in Education* or Adams' *Evolution of Educational Theory*, or other more recent books on the subject, will, I am sure, quite understand my feelings.

I asked myself: "Is this Conference so deeply concerned with the philosophical bases of education that the members desire me to speak upon Idealism, which emphasises the distinctiveness of man's nature and contends that the material and physical universe known to Science is an incomplete expression of reality, and that it exists but to subserve a higher type of reality in the spiritual universe?" Like the poet, I felt I could exclaim:

"My heart leaps up when I behold
A rainbow in the sky."

Reason in one ear and cold common-sense in the other whispered: "No; this millennium is not yet." A perusal of the topics listed for discussion on the Agenda Paper seemed to confirm the promptings of both reason and common-sense, especially when I read subjects listed for consideration, such as standardised salaries, standardised training, certificates and matriculation, size of classes and of schools, and the like. My former vision of spending a few happy days in philosophical speculation faded. I felt that idealism which deals with the possession of powers peculiar to man—powers that issue in the various forms of intellectual culture, art, morality and religion—were not expected to be treated by an over-worked Director, but came rather within the academic province of a professor of education. Yet the subject was alluring, and I parted from it with a pang; for education

deals so much with imponderables. What a pleasing thought it is that material goods are necessarily restricted in quantity and shared competitively, while the products of the mind are not diminished by being diffused. These products of the mind, unlike material things, must be acquired by each individual for himself and by his own efforts; they cannot be inherited or given, or even stolen. After all, these spiritual things are the lasting possession bestowed on the individual by education.

I always try to keep an open mind, and do not object to changing it for what appear to me sound reasons. I confess that at this stage I nearly recanted, but the reasons did not appear strong enough. But then I was beset with another difficulty. It is said that Australians as a whole are hostile to culture, that our leisure time is mainly taken up with sport and gambling, that in "getting and spending we lay waste our powers," that "plain living and high thinking are no more" with us, and so on.

For instance, Sir George Wilkins, the explorer, who was born and educated in South Australia, remarks in his book *Undiscovered Australia*: "Most Australians are well off in regard to creature comforts, and many of them soon reach independent means; yet the absence of the expressed desire for culture and for higher things, and their contentedness with the mediocre, make them the poorest rich people in the world to-day."

That condemnation, in turn, reminds one of the famous singer (also an Australian) who was falsely reported to have advised another Australian artist in regard to the appreciation of classical music by Australians: "Give them muck; they will appreciate it."

I trust I may be absolved from the charge of going to this other extreme in changing from the philosophical to the practical in my short address.

The element of truth there is in the charge that as yet we are not a highly-cultured people is one the remedy

for which lies mainly with the teachers. In the endeavour to lift the general average of education, to create an interest in the things of the mind and spirit, teachers can do more than anyone else, and conferences of this nature must also do much good. Without further ado, therefore, I shall proceed to develop my theme on the lines which I think were possibly intended.

Throughout the world ideals of education probably have much in common. The duty placed on me this afternoon is thus to speak on "Some Ideals of Australian Education"—a duty which might seem to imply that Australians have educational ideals peculiar to themselves. I doubt very much whether this is so in reality. In the endeavour to formulate some of our aims and ideals I cannot claim that they are fundamentally different from those of people in other countries, where the aim is to have a really educated nation.

We claim to be an advanced democracy, and our people have already shown themselves prepared to try industrial, social and political experiments on the grand scale. Assuming the old ideal of democracy as "Government of the people, by the people, for the people," our schools must play a most important part in preparing the rising generation for the high duties and responsibilities they must undertake on leaving our schools. Only a highly-educated nation can be expected to make a success of democratic institutions. If democracy is not to fail as in the past it has failed when tried, then our schools must be imbued with the democratic spirit; they must give the pupils a training in the forms of democracy (for what we do not practise we do not learn), and we must prepare them to face with knowledge, vision and courage the difficult problems of adult life. In this regard the development of character and sympathetic understanding is more important than that of training in mere intellectual skill.

In order to achieve this aim it seems to me probable that the organisation of education in Australia has some advantages as compared with other countries.

As you know, in each of the Australian States public education is centralised in an Education Department. The officers dealing with education, including all teachers and inspectors, are public servants. Under these conditions, whatever the people as a whole decide to do can be put into operation skilfully and expeditiously. This is not the case in most other countries, *e.g.*, Great Britain, United States, Canada, etc., where local control of education is the rule. It seems to me that education is a matter of such vital national concern that it should not be left to the mercy of often varying local opinions and circumstances. While under a system of local control it may and does happen that certain cities provide wonderful educational opportunities; it also happens that, particularly in rural and poorer parts, the facilities are not nearly so good.

In my opinion it can fairly be claimed that the general average of education is higher under a centralised system; and as faith and confidence in the value of education grows, conditions under a centralised system will continue to improve. You, as representative teachers from the different States, know how much is being done to encourage and stimulate local interest in schools and in education. The growth of Parents' and Citizens' Associations, School Committees, Mothers' Clubs, and the like, and the fine work they are doing, are eloquent testimony of this. There seems to me to be ample scope for local interest and enthusiasm to express itself under a centralised system. Relieved of the necessity of providing directly for buildings, grounds, maintenance, salaries of teachers and cost of administration, the people of any locality have even fuller opportunity for doing valuable service in providing additional opportunities and comforts for children in the way of school libraries, healthy recreation and games, scholarships, free meals and clothing where necessary (as happily is very rarely the case in Australia), and in many other directions. The change both

in the attitude towards and the interest taken in our public or State schools by the people in different localities has been simply remarkable. This co-operation of parent and teacher in the education of the child has been one of the most beneficial changes in education in Australia during the last quarter of a century.

Much is said and written nowadays about "the new education" and "the new outlook in education." Though they are conscious that new subjects have been introduced in the curricula of schools, and changed methods of teaching have been adopted, many people seem to fail to grasp what the essential change is. To me it seems to be a part of a great democratic movement which either consciously or unconsciously has for its objective the provision of a full educational opportunity for each individual to the limits of his or her capacity. It is implied in the slogan of the British Labour Party, "Secondary education for all," and for its full realisation means a carry over from secondary to adult education.

Last century saw throughout the civilised world the successful issue of the long struggle to provide free elementary education for all. The fight in this century is to provide for the further stages. Beyond the elementary stage it was formerly regarded as sufficient if the way was open to a few brilliant and talented children to receive higher education. The aims of education beyond that of the elementary school were then mainly to provide a modicum of culture for the children of the well-to-do, and to train only the talented ones for positions of leadership in the community. Training for leadership must always be one of the leading aims of education, and this is of special importance under modern democratic conditions, in spite of widely-held opinion to the contrary in the United States, where too often the pace of a class is determined by that of the most backward member. It is not regarded as democratic to leave poor little Moron behind.

The older systems thus provided only a relatively few scholarships to enable children of talent (whose parents were unable to afford the expense of secondary education) to climb to higher positions of influence in the community. Such a meagre provision is not now regarded as nearly sufficient to meet the needs of any modern community. Consequently, throughout Australia the States are providing schools and courses for pupils beyond the elementary stage.

The present ideal in Australia may be described as the provision of what has been termed "the broad highway" of education, along which all may travel freely. This metaphor of a "highway" or "open road" is, I think, somewhat misleading. I cannot conceive that it would be in the best interests of any community that *all* its future citizens who are of normal mental ability should pass along practically the same path through primary schools, secondary schools and a University before entering upon their life's avocations. Such an attempt would be doomed to failure, and would ruin the character and work of the universities, which ought to be institutions for training those of special ability for service in their generation, either by the dissemination of higher knowledge, by providing training for the practice of specially-skilled professions, or by research to extend the boundaries of existing knowledge.

The provision of educational facilities for the stage beyond that of the primary schools has been undertaken by all the States with enthusiasm during the last quarter of a century. This is part of a world-wide movement, and the same phenomenon is observable in every country in the civilised world. At first the tendency was to follow the traditional type of existing secondary schools which in the past had formed a nexus between the primary schools and the universities, and which until recent years had either been private ventures or established by religious denominations often subsidised by the States. The provision by the States of schools in

this field directly controlled by Education Departments caused many new problems to emerge.

The first secondary schools established by the States were purely empirical, and on the whole their courses followed traditional lines. But soon demands arose for wider courses, for new subjects — especially those involving practical instruction — for richer curricula. These found expression in the establishment of Junior Technical and Trade Schools, Agricultural and Rural High Schools, Schools of Domestic Arts, Commercial Schools, and the like, in the different States. In place of a common highway in the post-primary field of education it was soon found that there should be several paths through this field. The schools should prepare pupils for adult living in the full sense of the term, and adult vocations and responsibilities are many and varied. How can this difficult position best be met?

Is the single-purpose or the multi-purpose school in this field the line along which a solution will be found? If we have different types of schools for the different courses, how are parents, teachers or pupils to decide wisely which school or path a pupil is to enter on leaving the primary school? It is at this point that we encounter the most serious difficulty facing parents, teachers and educational organisers to-day.

While the single-purpose school has certain advantages, it has nevertheless many more serious disadvantages and dangers. From the parents' and teachers' point of view the child at the age of 11 plus years is too young to be committed to a path leading definitely to a certainly known objective such as a group of trades or other type of occupation. From the point of view of the educational organiser these difficulties are enhanced by the inevitable overlapping and waste and the blatant rivalry of schools competing with one another for pupils. Too often in the desire to fill the schools with pupils, the real educational needs of pupils are lost sight of; parents and even teachers are confused

by the conflicting slogans of rival establishments; real progress is lost and the State impoverished. The vocational guidance and placement movement which is growing in the various States will certainly help to clear the air somewhat. As you know, the aims of this movement are to discover the individual pupil's aptitudes and interests, and his and his parents' desires, and then having first in the broadest way determined the objective to give first educational guidance, and then vocational guidance, and finally to place the pupil in a definite vocation, the conditions of which have been thoroughly considered beforehand. The after-care committees follow up the pupil, encourage him to retain contact with educational institutions—particularly with technical schools—all the time keeping in view not solely the need to earn a living, but also the future privileges and duties of the student, both as a citizen living in a society of human beings mutually inter-dependent, and also as an individual who will play a part as a future parent, and use leisure wisely as well. The success or otherwise of this work must depend very largely on the vision, the self-sacrifice and the spirit of service of the teachers.

It is indeed fortunate that this problem of the adaptation of educational post-primary facilities to the educational needs of the rising generation should have received prolonged and serious consideration by highly-qualified committees in other countries. In this connection I need mention only the Salvesen Report for Scotland, the Malcolm Report on "Industry and Education" for England and Wales, and the epoch-making Hadow Report on "The Education of the Adolescent." All these reports agree on fundamentals. We are further very fortunate that at this particular time The Carnegie Corporation for the Advancement of Learning has very generously made a magnificent and munificent endowment for educational research and service in Australia. In a matter so vital and all-embracing as

education is in a modern State, research is absolutely essential, but the need for it has not been recognised in Australia. Its possibilities are almost infinite, and research may be able to do for education what it has already done for scientific discovery and invention. Merely empirical methods should not be followed in a State-wide system, though in a system of local control they may perhaps serve for a time. I feel sure you all join with me in welcoming this fine gift, and in hoping that great good to Australian education will come of it.

I feel that I can safely state that one of the ideals of Australian education is the provision of secondary education for all normal children. We aim at providing in this stage forms of education suited to the natural abilities and interests of individual children, but we are not absolutely clear as to the best means of determining what these interests and abilities are, or in the organisation of the provision to meet these requirements.

Teachers, doubtless, have long recognised the fact, and the public is beginning to recognise it also, that, after all, the question of all questions, the matter of fundamental importance, is the teacher. The great problem in a national system is to attract the right types of mind and the right personalities to the important service of education.

Unless we succeed in doing this, we must fail, no matter how hard we strive. No matter how we re-organise and adjust our systems, no matter how we revise our syllabuses and courses, or train our teachers, real success will not be possible if the service fails to attract a high proportion of the intellectual and moral force of the community. The teacher should be given higher status and be held in high honour by the community. Next to the satisfaction derived from his important work in the education of the rising generation, the teacher's greatest reward will probably always be that arising from public appreciation and honour. We still have far to go in this regard, though the last

decade has seen some improvement. In order to attract and retain in the Service the best types of teacher, it seems to me that four things are essential—adequate salaries, higher status, greater public appreciation, and fuller liberty in teaching. Undoubtedly we are moving upward, and a real professional spirit is permeating our ranks more and more. Let us all endeavour to make ours the worthiest of all professions—one in whose ranks it is an honour to serve.

The need for the proper professional training of every candidate before entering fully on the work of teaching is now very generally recognised. In most of the States teachers are trained in Teachers' Colleges before classification. When this is the rule in all the States, another important stage will have been gained in the rise and progress of our profession. I should also like to see all our teachers (including primary and sub-primary teachers) have some contact for a year at least with University life as a part of their training. The close association of the Teachers' Colleges with the Universities in the various States makes this step a practicable one, and the number of teachers in Universities in Australia to-day shows a marked increase as compared with those in attendance years ago.

Public education has become a very costly business, and the rising expenditure on it is causing uneasiness in some quarters. If, however, we secure the right type of teachers and administrators, if we can realise more fully the possibilities of our work, then we may surely claim that we are creating in the developed and trained minds, characters and bodies of our future citizens—new wealth, of which the community can never be bankrupt. Personally, I cannot believe that money spent in making the rising generation healthier, wiser and more efficient can ultimately make a nation poorer. In the words of George Meredith, we must

"Keep the young generations in hail;
And bequeath them no tumbled house."

I cannot believe that it is wise economy to deny

to our youth the necessary educational opportunities to prepare them to face a very difficult and uncertain future. Though our youth do succeed to a most wonderful inheritance, due to the efforts of mankind in the past—a rich inheritance in knowledge, in scientific achievement, in literature and the arts, etc.—we must remember that they also inherit a heavy burden of public debt, and that they are faced with very difficult social, industrial, political and economic problems, to the solution of which wisdom, courage and self-sacrifice are required. These problems are greater than any people have had to face in the past. For the tasks before them our children should not be handicapped by lack of proper preparation. The greater the difficulty the greater is our obligation. The effectiveness of a nation rises or falls with the competency of its educational system. Education is a business that has never failed in dividends.

I shall conclude by endeavouring to state what to my mind is the highest ideal of Australian Education. It may be expressed in a very few words—that of public service. In all ages, schools have been the agencies for transmitting to the rising generation a knowledge of the prevailing type of civilisation. In this great work the teacher is the main force. To what nobler task could the work of a lifetime be devoted?

In Australia teachers are, in fact, public servants. That we may serve our day and generation faithfully, that we may leave the successive generations that have passed through our hands better equipped for the battle of life with loftier ideals, with wider sympathies, clearer visions, with greater skill, with more power of knowledge and understanding, is both our privilege and our duty. Unless these generations of children are also imbued with the spirit of service and brotherhood, our work has not succeeded fully. Let us through the merit of our work and example each do what we can, so that the profession of the teacher will be regarded, as it ought to be, as the most important in the community.

XI.

EXISTING DIFFICULTIES.

An Address given at the Annual Conference of the Victorian Teachers' Union at Melbourne on January 20th, 1931.

Since I last addressed the members of the Victorian Teachers' Union the financial and economic position of Victoria, and of practically every country in the world, has become increasingly difficult and uncertain. Then I stated that I felt sure that whatever difficulties had to be faced, and whatever sacrifices we would be called upon to make, teachers could be relied upon to set a fine example of leadership to the community.

The difficulties then forecasted are now upon us: the need for individual sacrifice in the interest of all is imperative, and whether as a profession we are reaching the height of fine example and leadership so urgently needed is a matter on which each of us must search his own conscience.

The organisation by teachers of a system of inter-school relief, to meet necessitous cases, is an outstanding example of fine public service unostentatiously rendered.

Such a time as the present involves the highest test of our citizenship, honesty, courage and willingness to make sacrifices that hurt in order to maintain our ideals. May it be that we shall come through this ordeal better and stronger, and by our acts and words so elevate our work in public estimation that it will be still more widely regarded for what it really is, namely, the noblest instrument of and the finest opportunity for public service which the world offers to-day.

This is a testing time for us, both individually and as a people. If we are wise, however, we should be utilising the opportunity to improve and strengthen our work, to produce bigger and better-informed citizens, still stronger in character, mind and body, and ani-

mated by high ideals of conduct and by goodwill towards each other and the community. After all, these basic things are fundamental in the aims of education.

Education must furnish the key to the solution of many of our present problems. A system of universal free education may be expected to develop an intelligent population. If the experiment of a democracy is to be a success, each citizen must realise his responsibility for the present condition of affairs, and not salve his conscience with the easy but futile excuse of blaming some other fellow.

If our Governments—Commonwealth, State, Municipal—are poor, the fault is our own, and is due to the fact that the knowledge, intelligence and political training of the average citizen are of poor quality.

If improvements are to be made, we must produce a better type of average citizen, able to think for himself and to work out and appreciate necessary reforms.

Can this improvement be effected by education? Already the voice of the pessimist is heard complaining that democracy is a failure, and that popular education is not worth the cost. But has universal education been properly tried and found to be really a hopeless failure? Personally, I cannot think this. As yet we are only at the beginning of this great experiment. Let us admit frankly that the high hopes entertained about fifty years ago as to the results that would accrue from the wider dissemination of popular education have not been realised. Education has not yet had a proper trial.

The greatest danger to education is that the process may easily become conventional and stereotyped. This destroys its very soul. Tradition, examinations, professional conservatism and political control of the professional side of our work all tend in this direction. Education being a preparation for life, it is useless to give preparation for the kind of life that passed away fifty years ago. Education should be not only a pre-

paration for life as it is to-day, but rather for the life that may be expected a few years ahead, when the present generation of school pupils enter it with the responsibilities of full citizenship.

During the next fifty years greater changes may be expected in the world around us than those of the last fifty years, and these probably exceeded those that occurred during the previous thousand years.

We must be prepared to adjust ourselves to rapid and great changes in the industrial, the economic and the political world. Education must change with life, both in theory and in practice. To stagnate is to die. Unless education undergoes constant adaptation to meet the needs of a rapidly-changing world with new social, industrial, political and economic problems constantly emerging, then it soon may be said with some truth that the effort to give universal popular education is not worth the cost.

Do we in Victoria appreciate the need for this constant adaptation, revision, and reorganisation of our work and of our system of education? Jefferson said that the constitution of a country should be thoroughly revised every twenty-five years. The need for review in education is much more necessary. What have we done in Victoria regarding the review of our curriculum?

Two years ago a Standing Committee of teachers and inspectors was appointed for this purpose, but as its report was shelved it has practically ceased to function. Yet in emphasising curriculum revision as the most important task confronting educationists for the next twenty-five years, Professor Sneddon recently claimed that two-thirds of the present public expenditure on education (in America) is wasted. This is probably a great exaggeration, but it forcibly directs attention to the striking need of revision.

Consideration of proposals for reorganisation with the object of securing better adaptation of school facili-

ties to local needs; of proposals for having systematic educational surveys made, in order to secure more efficient and economical organisation of facilities in different localities, and of proposals for a general review of the work of the department as a whole, has also been held over.

Fifteen years ago an advisory body, known as the Council of Public Education, was created by Act of Parliament, and in 1926 this body was asked to advise as to improvements that might be effected, particularly in connection with technical education. The Council over two years ago recommended the appointment of an expert committee, with the powers of a Royal Commission, to report. According to recent press reports, it appears that consideration is still being given to the question whether a Royal Commission or a departmental committee of inquiry shall now be appointed. The questions involved are of such fundamental national importance that it is to be hoped that the personnel will include at least some expert and experienced educationists.

Problems involving reconstruction and revision of education systems and practice are not peculiar to Victoria any more than are our present economic and industrial problems. In other countries, however, educational problems have been given much fuller public investigation than has been the case with us.

Progress in England.

In England during the last fifteen years the question of securing the most efficient form of education has been constantly before the public, and the whole system throughout Great Britain has been undergoing a complete reorganisation.

Let us take a hurried glance at the mother country and see how, in spite of unprecedented unemployment, and of industrial and economic troubles, she is facing this vital problem of education. The Fisher Education

Act of 1918 encouraged local authorities to submit programmes with the object of improving their systems. Much was done, but, as I have already described these developments in my report in 1922 up to that time, I shall not deal with them further to-day.

In December, 1926, the report of the Consultative Committee of the Board of Education, known as the Hadow Report on *The Education of the Adolescent*, was published. At least five other important reports dealing mainly with education and industry were published about that time. These all stressed the great importance of improving the education of children, especially from 11 to 16 years of age. The main objection to the older system may be summarised in the accusations of "marking time," of lacking reality, of being without purposive and planned connection, especially with the world of industry and commerce, which the majority of pupils would enter on leaving school.

The widely spread and intensive discussion which followed the publication of these reports showed that educational opinion throughout Great Britain was unanimous in support of the views expressed. The views were focussed by the Board of Education in a pamphlet called *The New Prospect in Education*, issued in May, 1928. This pamphlet selected from the Hadow Report the essential practical points necessary to secure administrative advance if the groundwork of reorganisation were to be promptly and truly laid.

Fresh Start in New Environment.

This reorganisation, thus generally accepted in Great Britain, certainly did not mean merely a reshuffling of children from one school to another. It involved a fresh start in a new environment with involved opportunities. To the pupils it meant the beginning of a new stage in a new world with opportunities of developing their special aptitudes and interests and of preserving their individuality. The collection of children over 11

years of age into larger groups makes these things possible, and is greatly in favour of the mediocre child, but opportunities for those better endowed were also provided. While the latter were to be promoted to a Selective Central School and High Schools, the former were to be given courses in which special attention was given to various kinds of practical instruction definitely associated with the rest of the curriculum, and taught by specialist teachers. The whole instruction was to be closely related to local conditions, this giving both reality and variety to the courses. As compared with the older courses, these have a far richer educational content.

In the two years following the publication of *The New Prospect*, over 2,000 departments were reorganised, and that rate is more than maintained at present. The proposal to raise the school-leaving age to 15 years from April 1, 1931, has accelerated the movement. (The raising of the school-leaving age has recently been postponed till September, 1932, when it will come into force.)*

On June 4 last the President of the Board, replying to a question in the House of Commons, supplied a list of 142 Education Authorities, whose schemes of reorganisation were largely completed, and he stated that the remaining authorities were actively preparing for the reorganisation of their schools.

In order to illustrate what has been done and what is proposed, I shall take two examples—one of Manchester, a city comparable with Melbourne, and one of Leicestershire, where the conditions are mainly rural, the schools scattered, and communications bad. From these two examples we should be able to draw inferences of value to us in Victoria. I would emphasise the fact that these two Authorities have been chosen merely to illustrate what is being done by all Education Authorities throughout Great Britain.

*The Bill was rejected by the House of Lords in February, 1931, but notice that a new Bill will be introduced in the House of Commons has been given.

Manchester's Reorganization Scheme.

I quote from the programme of Educational Development for 1930-33, approved by the Education Committee of the City of Manchester. Time will permit of only a few quotations:

(1) "The period of the present programme of the Education Committee ends on March 31, 1930. Its first programme ran from 1924 to 1927. Its second and existing programme, from 1927 to 1930, ends on March 31 next. The programme now submitted covers a period of three years from April 1, 1930, to March 31, 1933.

(2) "Good progress has been made with the proposals of the first two periods, and the experience of the last six years proves the value of the procedure by programme. The making of a programme of work for a specific period of time renders necessary a survey of the area as a whole, careful investigation into the comparative stages of development in the various sections of the service, and the arrangement, in order of urgency, of proposals for strengthening the weak places and providing for a general improvement throughout the whole system.

(3) "In the present instance there are two circumstances which have a dominating influence upon the content of the programme. The reorganisation of the schools on the lines of the Hadow Report is already a matter of practical administration, whilst the proposal to raise the age of compulsory attendance at school from 14 years to 15 years is expected to become so during the ensuing programme period. (Fixed for September 1st, 1932.)

(4) "The Education Committee has already established sixty nursery classes, and this number will be increased at every opportunity. Provision for two nursery schools is made in the programme, and one of these, it is hoped, will be completed early in the triennial period.

(5) "Provision for medical, including dental, treatment will be increased by the establishment of additional clinics in selected parts of the city, and the development of special schools for physically and mentally defective children will continue.

(7) "Accommodation for secondary school pupils will be extended by the completion of school buildings either now in course of erection or for which sites have already been obtained.

(8) "Provision for technical education will receive a considerable addition by the extension of the Municipal College of Technology, and by the opening of the two new branch schools, one of which is completed and the other in course of erection.

(9) "Evening play centres and school camps will be developed, and especially will an attempt be made to make provision for young people over 14 years of age in centres similar in character to the evening play centres for children. At the same time, no opportunity will be lost to increase the provision of playing fields for the elementary schools.

(10) "Great efforts have been made during the last few years to promote intimate and extensive co-operation between education and industry, and in this connection the Juvenile Employment and the After-Care Committees have done good work in introducing young people into industry. These activities will be developed, and, in all possible directions, a closer association between educational institutions and industrial institutions will be established. In this connection the Education Committee will give special attention to proposals for practical co-operation similar to the arrangements entered into between the Education Committee and (a) the Institute of Rubber Manufacturers; (b) the Builders' Association; and (c) the Chamber of Commerce, for the recruitment, education, and training of young operatives. The Education Committee feels that this kind of co-operation, guaranteeing employment to

selected young people on the completion of their preliminary training, is the best form of co-operation with industry."

(11) Deals with the development of a High School of Commerce.

(15) "Reorganisation will demand a reconsideration of the grouping of children up to 11 years of age. With the continued establishment of nursery classes there will be a tendency for children to be grouped in infants' departments up to 7 years of age and in junior departments from 7 to 11 years of age, although the force of circumstances will, in different districts of the city, lead, in some instances, to the establishment of a single department, taking all children up to 11 years of age.

(16) "At the age of 11 all children in "reorganised" schools who, for various reasons, do not proceed to secondary and central schools, will be transferred to senior schools for a four years' course. Frequent reclassification will be necessary in senior schools, and facilities for transfer of pupils to and from senior, central, and secondary schools will be an important feature of the reorganised system.

(17) "In order that the facilities for the post-primary course in senior schools shall approximate to those obtainable in secondary schools, it is necessary to make provision for specialist teaching throughout the senior schools. The school buildings must, therefore, include special rooms for science, art, crafts, needlework, domestic subjects, handicraft and gymnastics, together with class rooms (subject rooms) for such subjects as history, geography, music and English. As some of the children will be called upon to travel greater distances than formerly, it is essential that a changing and a dining room, with the necessary kitchen arrangements, should also be provided. Plans for typical senior schools which will comply with these requirements have been approved by the Committee and by the Board of Education. The cost per place of erecting new schools to

these plans is estimated at about twice the cost of an ordinary elementary school place. It is, of course, necessary wherever practicable to make use of existing school premises for senior school purposes, but in all such cases the Education Committee proposes, by adaptation and enlargement, that the facilities should, as far as possible, approximate to the provision designed for new schools.

(18) "The need for elasticity in the application of schemes of reorganisation cannot be too greatly emphasised. The schemes must be experimental and tentative, and subject to adjustment or change as the result of experience. The reorganised areas of the city will differ in size and population. Some will be densely populated, others more sparsely; some will be crowded with small dwellings, others will be new housing estates, and others will contain large dwelling-houses and open spaces. There must be a wide variety of treatment if the greatest benefit is to be obtained from reorganisation.

(30) "In surveying the municipal schools and preparing the tentative reorganisation schemes on a district basis, the first step has been to allocate the necessary accommodation for primary school requirements, *i.e.*, for children up to 11 years of age in infants' and junior schools or departments, and then, taking each district as a unit, to suggest the manner in which the senior and central school requirements for children in the age-group beyond 11 may be provided. . . .

"Two-decker schools are favoured, plans of which are given in the report. Thus for a city with a school population of over 120,000 pupils there are 90 Municipal schools, 54 Church of England schools, 33 Roman Catholic schools, one Jewish, and two Undenominational schools. Besides these, there are the Teachers' College, the Technical School, and the University.

The expenditure for 1930-31 is estimated at £1,841,863, or an increase of £70,593, as compared with the previous year."

Leicestershire's Reorganization Plan.

The following remarks are based on the report of Mr. W. A. Brockington, the Director of Education for the County:—

"In 1921 the Committee approved a scheme of Senior Divisions in Public Elementary Schools. The scheme provided for the reclassification of all pupils as they reached the age of 11 plus. The senior pupils were divided into two parallel groups, and the two groups were regarded as different 'sides' of the school, the essence of the system being that the dull child as well as the bright child should be admitted. The one 'side' was to continue a course of study differing in certain respects from that of a secondary school, on account of the lower leaving age; the other 'side,' consisting of those admitted on age qualifications only, received teaching suitable to their capacity, which was given so far as possible a definitely practical bent.

"It was found that in Leicestershire there were few schools with a sufficient number of senior pupils to make the organisation of a Senior Division educationally effective. With this fact in mind, the following note was appended to the scheme:—'The Committee will be able to offer places in such departments to pupils from neighbouring schools which are too small to have senior classes. The establishment of Central Schools may then be brought about to a large extent by voluntary arrangement, and as an organic development of the existing educational system; in any case, the impulse towards centralisation will have come from within.'

"During the summer of 1922 conferences were held with the Managing Bodies of 53 schools where reorganisation was thought possible. As a result of these conferences, 32 small schools were beheaded and affiliated to schools with Senior Divisions. This policy has been pursued by the Committee since 1922, aided to a large extent by the development of transport facilities in the

rural areas. The number of beheaded schools is now 108.

"Central Schools which draw senior scholars from a wide area have been built by the Committee at Lutterworth, Market Bosworth, 'Roundhill' (Thomastown), and Melton Mowbray, and a Church of England Central School has been organised at Church Langton. 'Selective' Central Schools have been established at South Wigston and Coalville."

The proposals for the triennial period, 1930-33 are: "The Board of Education require, in accordance with the terms of the Hadow Report, that post-primary education shall be provided for all scholars from the age of 11 plus. It is necessary, therefore, to concentrate all senior scholars, other than those who enter secondary schools, in schools equipped to provide education of a post-primary type. The following scheme provides for the division of the county into 33 districts, each served by a Central School, to which all the scholars of the district will be transferred at the age of 11 plus.

Some alternative suggestions have from time to time been received from managers and other interested persons. Other alternatives may be suggested during the negotiations for the establishment of the scheme, and may prove to be practicable. Although this will affect the scheme in particular details, and although these detailed alterations may be of the highest consequence to the districts concerned, their general effect may for the time being be ignored. Whilst they may vary the distribution of expenditure between the three main items—teachers' salaries, buildings and transport—they will not increase the total cost of reorganisation.

In some districts Central Schools of one or other of the types mentioned below have been established: "(a) Rural District Central Schools, serving as a rule large areas of sparse population, mainly agricultural. Only two of such schools are "selective" Central Schools, and

it is not proposed to increase their number. (b) Urban Central Schools, situated in towns whose population is large enough to supply a Central School without the transfer of outside scholars, except from a few neighbouring villages. (c) Suburban Schools in the area around the City of Leicester. There will also be for a time a few sub-centres, to be merged eventually in the larger schemes."

When the scheme is completed there will be 33 Central Schools in all in the county. The total number of children on the rolls of Primary and Central Schools is, for 1930-31, 38,500, taught by 1179 teachers, rising to 42,000 in 1932-33, with an increase of 149 teachers.

The total expenditure on elementary education for 1930-31 is £384,242, of which the conveyance of children accounts for £5976 (more than one-third of that spent in the whole of Victoria), while the amount spent on medical inspection is £11,476. It is expected that the amount spent on transport of pupils for 1931-32 will be £12,035, or more than double the amount for the current year. In addition to the expenditure on elementary education, the county spends £121,344 on higher education.

These two illustrations will serve to show how the mother country, in spite of stupendous difficulties, is facing the problem of reorganising her educational system according to modern expert opinion.

It is to be regretted that in Victoria full public examination and discussion of our problems have not been encouraged. The former Director (Mr. Frank Tate), who visited the last Imperial Education Conference in 1927, proposed to write a report on post-primary education as his official swan song prior to his retirement in 1928. He was informed that, if prepared, the report would not be printed and published.

A year after I became Director, the importance of preparing a statement of our problems seemed so urgent that in my own time I prepared a report on "Our Pre-

sent Problems." Authority to publish this has not only been repeatedly refused, but I have also incurred displeasure when I have touched upon certain phases of our difficulties in public, as it was considered these were questions of policy.

To me it appears that, before we can hope to find a satisfactory solution of our problems, the problems should be stated and understood. Possibly the promised Royal Commission or Board of Inquiry will do much to help in this direction. It would have been all to the good if a full public discussion and understanding of the whole position had preceded this expert investigation.

We are, however, fortunate that, thanks to the generosity of the Carnegie Corporation for the Advancement of Learning, an Education Service and Research Council has been established in Australia. This should make possible independent examination of our educational problems by experts. Their reports should be of great value to the public and to the cause of education.

XII.

EDUCATION AND WASTE.

An Address given at the Annual Conference of the Victorian Teachers' Union at Melbourne, December 21st, 1931.

It is always a pleasure to address a few words to our teachers gathered together from all parts of the State at their annual conference. Even though the times are difficult, and acute depression hangs like a dark cloud over the whole community, conferences such as this should not be abandoned. Indeed, it seems to me they are more than ever necessary, as they give the opportunity for concerting means necessary to conserve those things of essential value in our system, to inspire and hearten those who may be inclined to pessimism, and to consider and prepare well in advance measures to extend our services and make them of even greater value to the community. Indeed, if we are wise, it may be hoped that good will come out of the present depression. As Matthew Arnold puts it:

"Tasks in hours of insight willed
Can be through hours of gloom fulfilled."

It is not fitting that I discuss the vexed question of reductions. This should be a season of peace and goodwill, when personal grievances might well be put aside, for the time being at least. I stated at previous conferences that teachers should be ready and willing to bear their fair share of financial burdens in common with all members of the community. This, I think, should reasonably be expected so long as the burden is shared equitably.

It must be remembered that the present depression is not local, but is world wide in its incidence, and that its causes go far back into history—at least to the beginning of this century. During this period education has changed from being a rather simple process until to-day it is an extremely complicated and expensive one.

Drastic economy and reduction in all items of expenditure have become imperative everywhere in the effort to restore financial stability. Naturally we feel our own misfortunes most, but they may be rendered more tolerable by remembering that others are in as bad a plight.

Going outside Australia, and passing Great Britain, of whose troubles we have heard so much, let us glance at the United States of America, where over half the world's supply of gold is "cornered" and stored in the vaults of the banks. What do we find? "Way down in Tennessee" they have not paid their teachers' salaries in current coin for over six months. The same is true in Alabama, though in this case our sorrow may be somewhat mitigated by remembering that this was one of the eight sovereign States of the American Union which repudiated their debts to British bond-holders after the Civil War, even though the money had been lent for purely peace-time purposes, such as railways, canals, etc. In Chicago—but why go further?

Our conditions demand the strictest economy and the ruthless elimination of all waste. It may be hoped that as a result we shall secure a more business-like organisation of our whole system. We must do our best to secure maximum results for the money spent.

In considering such a problem it should be remembered that blind and desperate retrenchment, while it may give some immediate financial relief at the cost of much suffering, may ultimately mean extravagance and waste rather than economy. We need not go outside Victoria or outside our own Department for a previous example of this occurring. The introduction of the monitorial system and the utilisation of poorly educated and untrained youngsters as teachers may be cited as one illustration.

Our present desperate position, however, makes us all, and especially administrators, think furiously in order to secure a more business-like organisation of our whole system.

For some time I have urged re-organisation, par-

ticularly in our post-primary system, and in these efforts, which have been so far without result, I have had the support of the teachers.

It seems abundantly clear that rivalry between schools, and duplication where it exists to the extent that we are not making the fullest and best use of the facilities provided, will have to be eliminated as far as possible. We should aim at securing greater coherence, greater co-operation and greater co-ordination if we are to secure the best results. These things are among the main questions which have been referred to an Education Inquiry Board, which has now been sitting for the greater part of the year.

We must all realise the need for drastic economy in public expenditure, and the imperative necessity for the elimination of all waste and overlapping where these exist. We must aim at securing the fullest and most effective utilisation both of personnel and plant.

At the same time we must endeavour to avoid serious impairment of our educational system. It is to be hoped that retrenchment will not take the forms of stagnation in development, starvation of existing primary schools and crippling of secondary schools. This would indeed be a counsel of despair equivalent to a sterilisation of the brains of a large section of the community—indeed, it might almost be described as a massacre of the innocents.

All leading educationists and thinkers freely admit that in the present state of human society, animated as it is with democratic ideals, an education of elementary school type, which finishes when pupils reach the age of 14 years, is not nearly sufficient, and that if it ends there it is wasteful in not securing an adequate national return for the expenditure.

The only assumption permissible is that up to the age of about 18 years boys and girls should be kept in touch with educational opportunities, that all members of the community should co-operate in providing these opportunities, and that such opportunities should pro-

vide for the needs of individuals by giving different types of training.

It should be obvious that the justification for raising the age of compulsory attendance at school to 15 years depends on the use to which the extra year is put.

These considerations lead to two very important questions, and their importance is all the greater in these very difficult times.

The first is the waste involved in our failure to revise the curriculum, and the second is the more obvious waste in allowing children to leave school and the educational and moral guidance it provides, unless they have definite positions and work to take up.

The need for a reconstruction of the curriculum has long been obvious. The last reconstruction of the curriculum of the elementary schools Course of Study took place about 25 years ago, and in the interval there have been only minor adjustments. In this period there have been great world changes which have been reflected in educational systems everywhere. Re-organisation of the system must go hand in hand with re-organisation of the curriculum, which must be not only freed from the debris that collected, but new subjects must be introduced and a new orientation to old subjects provided.

Assuming that a competent revision would show that 10% of the present curriculum should be changed to that extent, there is a 10% waste in our educational expenditure. While admittedly this amount cannot be "saved" for the purposes of balancing the budget, it can nevertheless be utilised efficiently so that it will give more than 10% increased educational value. This seems to me to be true economy, but to leave things as they are is waste.

I intend, therefore, to submit proposals for appointing curriculum revision committees for 1932 as the work involved will take some time to complete. Nearly every other country in the world has undertaken this work, and the Second Hadow Report issued this year

on the work of elementary schools, is a clear indication of how far the people of Great Britain have gone in the matter. The abolition of both the Qualifying and Merit Certificate examinations as external examinations will necessarily be involved in this question.

Turning now to the question of the danger to children leaving school and being unable to find employment, I am of opinion that waste occurs in two ways. If these young people become disheartened and disillusioned in their vain search for openings to give them a start, the soil will be well prepared for the propagation of subversive anti-social propaganda, and many will fall first into bad habits and then into crime. In other words, they will change from being our best national assets into being our worst liabilities. Surely it is waste not to conserve our assets, not to use our utmost endeavours to keep these young people under educational guidance and control. There was never a time in our whole history when it was more imperative that we continue to give the best possible training to these young people, to maintain their ideals of conduct, of service and of living, and to fit them for the difficult future even better than we have done in the easy past. Nor has there ever been a time when the change could so easily be made.

Secondly, it is wasteful not to utilise the services of teachers to secure the greatest possible advantage to the community.

At present we have a surplus supply of teachers, and surely it would be both wise and economical to utilise their services in the work I have indicated rather than to turn our present temporary staff adrift to swell the great army of unemployed. It would be well, too, to use all our permanent teachers to do the work they have been specially trained to do. It appears to me to be waste in administration not to utilise, for example, our teachers of manual arts and of domestic arts in teaching their special subjects but to be compelled to use them in teaching other subjects for which in many cases they

have neither special qualifications nor training. The Department should be in a position to use the services of any teacher in the work he can do best; otherwise we are not using our staff in the most efficient way.

I venture to say that if the age for compulsory attendance at school were raised to 15 years and re-organisation as indicated above effected, the increased cost to the State of the change would be a mere fraction of the increase estimated some years ago.

This raises the question, "Is education worth the cost?" I say unhesitatingly that it is. I should imagine that every economist will admit that the real wealth of a nation lies in the health, character, skill and citizenship of its people, and that its schools create, conserve and multiply these human resources.

Education has made possible this age of machinery, mass production and giant industry. Education is now obliged to provide, not only the solution of our present difficulties, but also those creative factors that give life its real significance. Every pound spent in providing education means many pounds saved in preventing inefficiency, disease and crime. Education is the best form of national insurance.

I feel that I should not close this address without expressing my high appreciation of the fine work our teachers are doing. Throughout the length and breadth of the State, in cities, towns, villages, and remote rural places alike, they are faithfully carrying out their work. That time is past when teachers were numbered among those who

"Dismiss their cares, when they dismiss their flock;
Machines themselves, and governed by a clock."

The development of the social side of education and extra class-room activities which have been such marked features of these later years throws much additional work on teachers. They have responded nobly. In conclusion, I trust you will have a happy and enjoyable vacation and return to your schools re-invigorated for the responsible work awaiting you in 1932.

